THE BRISTOL

Medico-Chirurgical Journal.

DECEMBER, 1894.

COMPARATIVE PATHOLOGY.

A STUDY IN THE GARDENS OF THE CLIFTON ZOOLOGICAL SOCIETY.

The Presidential Address,
delivered on October 10th, 1894, at the opening
of the 21st Session of the Bristol Medico-Chirurgical Society.

BY

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I CAN assure you, I appreciate very highly indeed the honour you have conferred upon me in electing me the President of this very important and excellent Society; certainly, to praise it in the lower strain, the most important medico-scientific Society in the whole of the West of England, and had I not your goodwill and wishes to encourage me, I might well feel appalled to occupy the presidential chair this evening, when I reflect upon the stirring and clever addresses which adorn the archives of the Bristol Medico-Chirurgical Society.

In anticipation I, naturally, have passed many subjects through my mind in order to arrive at one which might be acceptable. We have had glorious reminiscences of the past, sanguine forecasts of the future, the medical essences and

psychological problems of Shakspere produced in a most fascinating manner, records of mistakes, shortcomings, and repentances,—and would that these were more frequent, for more is sometimes learnt from failures and disappointments than from long parades of successes; then, only last year, we had a most eloquent discourse on books, what they are and what they ought to be, and on the weaknesses of editors in pandering to the depravity of literary tastes.

At one time I thought of putting together my professional experience—of now exactly forty years' duration. Its early details would have embraced the time when chloroform was first being generally used, and the stethoscope had hardly established itself as a general appliance; when hospitals were much fewer in the country, and there were very few local hospitals and no cottage ones, and when patients suffering from fearful injuries—accidents by machinery, or extensive burns,—or from severe pneumonia, fever, bronchitis, phthisis, aneurism, &c., &c., were often conveyed many weary miles in country carts and wagons; and when burns and wounds generally, if dressed at all antiseptically, were done so rather by fortuitous accident than by intelligent design.

Or, I might have taken up the subject of Small-pox, and the to-day burning question of Vaccination. I could have related cases of the very worst forms—virulent, confluent, hemorrhagic —and have drawn comparisons between the past and the present, greatly in favour of the latter.

However, these subjects I have thought of and dismissed, not because they were not good and adequate ones, but because in this annual address each occupier of this chair takes up some theme which is nearer to him, and more in accordance with his tastes—or, in other words, he rides his "hobby" for the time being, and "struts and frets his hour upon the stage" in his most suitable character, as he may think, and in which he trusts he may be the most presentable; and therefore I claim your considerate indulgence whilst I conduct you,—in a somewhat discursive and fragmentary manner, I admit—along a pathological ramble, through our justly celebrated Zoological Gardens.

It is known to most of you that I have been connected with the Gardens for a good many years, and I have, during that time, come across and collected together a few interesting and, of necessity, somewhat rare details. They must be fragmentary, and therefore disjointed. I cannot undertake to arrange them in any anatomical, physiological, or even pathological order. These more scientific conditions can only be obtained after and through experiences far transcending mine. I only hope to make a few contributions towards such desirable records, since Comparative Pathology must throw some light upon human diseases, and will in the future form an important subject.

The first case was a very remarkable one, and, as far as I know, unique in many of its circumstances. Some years ago our Zoological Society possessed a very splendid specimen of the African lion, which rejoiced in the name of Hannibal. He was truly Hannibal I., for there has been a successor, the second of that renowned name. He was the pride of the Gardens, as he was held to be the finest lion in Europe. He always seemed in splendid condition, and until a few months before his death had never been ill. On the morning of April 29th, 1878, this grand specimen of the feline race was found dead in his cage. The underkeeper unlocked the house and passed his den, and happened to notice, as he thought, the animal asleep, his head resting on his forepaws. Returning in a few minutes, the man observed the lion in the same position; his suspicions were aroused, and he soon discovered the lion was stiff and dead.

An hour or two afterwards I saw Hannibal in the slaughter-yard at the back of the lion-house, and never shall I forget the impression produced by my first *dead* lion. His enormous limbs and magnificent proportions filled me with awe, and as I gazed I almost shuddered at the thought of the ease with which those massive and sinewy paws could have crushed me only a little while before; but verily, a live dog is better than a dead lion. His race was run, his seventeen years had been told. On opening the abdominal cavity, there was seen an enormous extravasation of blood, which had come from a ruptured spleen.

This organ weighed 21½ lbs. I afterwards endeavoured to ascertain the weight of the spleen in these large carnivora, and I have known it only nine ounces in a fairly healthy animal, and rarely, in any other case within my knowledge, coming up to a pound. It evidently is not a large organ in Felidæ. The heart and valves seemed quite healthy; there was a small clot in the left ventricle, and a little dark blood in the right auricle. The lungs were congested at both bases, and the right one had a carnified mass in it as large as a small orange—probably a hemorrhagic infarct of oldish date, or a result of inflammation. The kidneys, which were a good deal congested, seemed large, but I cannot give comparative weights. The liver was large, and contained a cystic tumour in the anterior part of the large lobe, near the gall-bladder. The cyst contained clear, colourless fluid. The stomach and intestines were apparently quite healthy. The stomach contained a quantity of mucus—scarcely acid to litmus paper; its muscular coats, and those of the small gut, were thick and well-developed. The splenic enlargement seemed to be caused by hyperæmia and increase in the lymphatic and vascular elements—but what was the etiology? Are lions subject to malarious attacks? and had Hannibal been a victim in the days of his youth, in his native wilds—for he was forest-bred—before the civilization of captivity had fallen upon him? He had been ill a couple of months or so before his death, when his breathing was affected. Did he have pneumonia then, with carnification of the base of the right lung—or perhaps more probably a hemorrhage from an embolism,—or are lions subject to splenic fever?

There remained no doubt that death had been caused by hemorrhage arising from rupture of the spleen; and the following is, doubtless, the explanation. The lion had copulated with the lioness on the previous day at 10 a.m. and again at 6 p.m. There was no eye-witness of these acts, but the head-keeper, Blunsden, who is an experienced and observant man, said he felt certain of the fact because he had heard the lion make a very peculiar roar at those times; and he added, "I should know what that roar meant if I heard it a mile away." The sequel proved that he was correct. The animal

during the evening act of copulation had ruptured his enormously enlarged spleen, and then had gradually, but inevitably, bled to death during the night. His huge spleen had not caused "desire to fail" and consummation of the act or acts was accomplished, and resulted in the lioness (kept alone during this period of her widowhood) producing in due time three fine cubs—two males and a female. One of them grew into the celebrated Jupiter, which we shall hear about again later on; the female grew up and was sold; and the third died on June 16th, 1881, from a kind of distemper of long duration, and accompanied with skin disease. I said the cubs were born in due time. What is this due time? We were anxious to verify the head-keeper's opinion that the period of gestation was sixteen weeks, and here was an opportunity. From the 29th of April to August 18th constituted sixteen weeks: the cubs were born on August 16th.[1]

There are tragedies enacted in the "Zoo." Listen to a select few.

On the same day that I made the *post-mortem* examination of Hannibal, a small monkey had been humanely killed because its companions had gnawed one of its arms off. The limb had somehow got entangled in the wires of the cage, and in their wisdom the other monkeys seem to have thought this mode of extrication the most ready one. Perhaps ardent admirers of "Darwinism" may in this recognise advance of type—rudimentary surgery amongst the "caricatures of man." I cannot report as yet any progress in this direction; but then the steps are very slow, and the time since has been short. The viscera of this sacrifice to surgery seemed quite healthy; but what struck me as remarkable then—and it has been corroborated since by many observations—was this, the very small ratio of *lung tissue* the quadrumana have. The lungs of monkeys seem to me to correspond very much with what we see about their antics—a succession of little movements, quick and often, a leap, a

[1] Lions, tigers, and bears are said to have a period of gestation of sixteen weeks; pumas and leopards, thirteen; our domestic cat, fifty-six days, or just half the time of the bigger felidæ; a bitch goes about sixty days; a mare, 350 days; a giraffe, 420 days; an elephant, 600; whilst an opossum is stated to go only eighteen days.

scramble, and then a rest; a period of quick breathing and then a pause. They feed much in the same way: the monkey's creed is "a little and often."

On May 27th, 1878, two brown bears were noticed to be very ill in the bear-pit. They were both violently convulsed at times; from the similarity of their symptoms, and the suddenness of the attack, there could be very little question that they had been *poisoned*. One died in a few hours. Its body and extremities were extremely rigid; the ears and the tail especially were so. I really believe that the rigid tail would have supported the extended weight of the animal. An analysis made later on of the viscera and their contents revealed, as had been anticipated, the presence of a very large quantity of strychnia. It was always suspected that a man, who had been connected with the Gardens, had poisoned these unoffending creatures; but proof of guilt could not be brought home to him. The other bear recovered only partially, then relapsed, and lingered on in a thin and miserable condition until August 17th—eighty-one days. The *post-mortem* examination showed a number of tumours on the liver, of the nature of which I have no records. The state may have been connected with chronic poisoning; but I know of no analogous cases in the human subject, although there are instances in which recovery did not occur for a month or six weeks after the strychnia had been taken. Shortly after the deaths of these two bears, another died, about five years old, and the *post-mortem* examination showed that it had stricture and invagination of the descending colon not far from the rectum. I need hardly say that no attempt at abdominal section had been made during life. Possibly the surgeons of the future may perform an "Ursine" operation; if they do, they will surely revive some Brunonian theories of "excitement!"

On May 2nd, 1889, a female llama, ten years old, died of hemorrhage from the right jugular vein. The male animal, in a savage connubial mood, had bitten her in the neck and opened the jugular vein. At least a quart of blood had been lost, when the keeper, with the aid of Mr. Munro Smith—whose kind aid has often been rendered to these helpless animals,—stanched

the bleeding, and for an hour or two all went well, but then the keeper, with kind but injudicious intentions, gave the animal some oil-cake. The act of mastication and swallowing doubtless disturbed the clot, for fresh hemorrhage came on, and the animal shortly died from exhaustion. The lungs were much diseased, the right one was solidified. The male was the son of the victim, so here we have a case of matricide and wife murder combined in one.

On February 16th, 1889, the lion Jupiter, whose birth I have chronicled, and who had grown up meanwhile a worthy and very fine representative of his father, Hannibal I., had a claw on the fore-paw extracted. His health had always been very good; but for several months it had been observed that he walked about his den with a limp, which was caused by an in-growing claw. The felidæ have the power of extending and withdrawing their claws, as most of us know who have had much to do with kittens and cats. It seemed, so far as we could observe, that a claw in the left fore-paw could not be sheathed, and that it was growing into the flesh and gradually laming the animal. Possibly in their wild state the rough treatment their claws must necessarily get prevents such an accident; or it may happen—who knows? Perhaps Androclus gained the friendship of his lion by extracting a claw and not a thorn! The animal seemed to be getting worse and worse, dropped his shoulder, and was evidently often in pain. Something must be done, as time, usually the great healer and remedier, seemed inoperative here. Chloroform was out of the question: the attempts to give these animals anæsthetics have been failures and worse. The irritating and superfluous growth must be extracted, and after various "connings," there seemed to be but one plan; viz., the "cramp cage." So the operation was fixed for the next morning, and there was a fair attendance of interested spectators. The first part was getting the lion out of his den into the travelling cage, and then attaching the cramp cage to one end of it. The details are interesting; but time is precious. Let it suffice that the animal was got into the "cramp." He didn't like his quarters, and showed that even within the comparatively small dimen-

sions he could turn round and so evade any efforts to get hold of his claw. Planks of deal, one foot broad by one-and-a-half inches thick, were then put into the cage to limit the space. The animal was fairly furious before; but now came such a display of rage, that no one who did not see it could imagine it. He fought for dear life, as he thought. Plank after plank was seized and ripped up like so much match-wood, and it seemed as if the iron bars and plates, strong as they were, would not contain the infuriated beast. His mouth bled, and he broke a tooth. Several of the keepers stood on the top of the cage to prevent it from being overturned, and some of the spectators took refuge by quietly withdrawing from the scene. At length, by putting in plank after plank, above and behind, the poor brute was brought to bay, and, to save himself from his very constrained position, pushed out his paws through the bars of the cage. "Now's your time," I said. Blunsden immediately seized the offending claw with a pair of strong carpenter's pincers; the grip was good. The animal helped in the operation by trying his best to get his paw free, and the claw came away. It had grown into the flesh at least half an inch, most likely more; and here I can show you the very thing. In half-an-hour afterwards the creature had quite calmed down: he seemed then to have comprehended the rationale of the operation, and he gave me the conviction that if he had had to undergo a repetition he would have been a mild consenting party. The operation was completely and permanently successful.

The account of the operation got into the papers, and several of them made their comments; and amongst them the *Standard* of February 20th gave a long editorial, and raised the question of whether the necesssity for operations arose amongst wild beasts in their natural state, and also of what became of the bones of dead animals, for they were so seldom and so scantily found by hunters and travellers. I must not diverge into this question; but I can offer one explanation. We had a hyæna in the Zoo for many years, which would grind up and consume the hardest bones which were given to it. We have had other beasts with in-growing claws, and only a few months ago one

of our present leopards, old Jerry, was put in the cage, and underwent an operation of having his claws pared with very little difficulty or trouble to himself.

On July 1st, 1889, a lioness, rather rickety, died of rupture of the uterus, in the right cornu. One cub had been born, for it was found in the den afterwards, and the other lay in the vagina partly extruded. The mother had been in labour five days, which must have been a very unusual time for a carnivorous or any other animal. A year or so after this, a puma died under similar circumstances. The specimen of the ruptured uterus is in the museum of the Medical School. Somewhat akin to these cases, an interesting one occurred last year.

On Saturday, May 6th, I received a message at 8.30 a.m. that an Arabian gazelle had been in labour some hours, but even with the assistance of the keeper could not produce the "kid." Examination showed that the passage was all right, but the kid was very large. I went back home and procured a pair of small midwifery forceps. Traction with these seemed to advance matters nothing; so, with the advice of Mr. Munro Smith, we determined upon abdominal section—a Cæsarian operation, may I style it? Chloroform was given, which the gentle creature took well. A very large but well-formed kid, already dead, was taken away, the wounds were carefully washed antiseptically and stitched with cat-gut; then the patient's abdomen was smoothly bandaged, and the animal slung up in a sack, with slits in it for the legs to pass through; the feet were tied together to prevent any attempts at struggling, and so obviate any tendency of the stitches in the wounds getting torn out. She went on well for some hours, and in the evening, about 10 o'clock, she was left in charge of the keepers, one of whom was to remain with her all night. She had taken a little nourishent, milk and gruel, and nibbled a little bit of hay, but at four a.m., after a slight shivering fit, when the man very feelingly threw his coat over her, she passed away. Subsequent examination showed that scarcely a stitch in the wounds was disturbed; there had been no hemorrhage, and there was no peritonitis. Many of these animals bear shock very badly indeed. She defied the arts of

surgery, they were not for her, and in the night her spirit had perchance gone back to the blue hills of Persia or the lands of Arabia the Happy!

In relation to chloroform, the following case has points of interest. A favourite cockatoo had been placed in the bird-house by a lady because it was becoming blind, and she hoped something could be done to lessen its sad affliction. Examination showed that it had cataract. Mr. Cross very kindly examined the eye, and an operation was determined upon. I gave the chloroform; a piece of lint with half-a-drachm upon it was applied to the head of the bird, which could have had only an infinitesimal whiff, when it fluttered its wings and died. Either the heart, which had responded again and again to the caresses of an over-indulgent mistress, would not be cajoled by the wiles of an anæsthetic, or its life-span coincided with the time of the administration; for birds often drop down dead from their perch.

If they won't bear shock well, animals do not refrain, nevertheless, from occasionally fighting to the death. Raccoons usually seem peaceful enough together, but every now and then —whether from bad temper or a species of insanity—they have very serious frays; and about three years ago two of them must have had a terrible pitched battle one night, for when the house was opened the following morning, one of the males was discovered with a hole in the left side of its abdomen, through which protruded so much small intestine, mesentery, and mid-riff, that the only course to pursue was to give it a speedy despatch. Lately two female badgers fought most desperately; one was killed at once, and the other, awfully mauled, died in a day or two. About this period a young black panther, which had been born and reared in the Gardens (a very unusual event in this country), ailed for some time and died. The *post-mortem* examination gave evidence of a rupture of the liver near the gall-bladder, with effusion of bile into the peritoneal cavity. The animal was very fond of leaping about, and the supposition was that in doing so it had ruptured the liver.

On Friday afternoon, June 2nd, 1893, the larger of two Polar bears died. They had been denizens of the Gardens for nearly

twelve years, having arrived in a very "cubby" condition in November, 1881, when in consequence of the ice-floes coming down far south the whaling boats had captured a good number, and Polar bears were rather at a discount. The deceased had been seen to eat her dinner as usual and with apparent avidity, when suddenly she rolled over in a fit, threw up her legs, and then, turning over and over, fell into the bath in an insensible state. The death was attributed to apoplexy; but the verdict was not verified *post mortem*. The weather was very hot, and the stuffer could not keep the head long enough for me to examine it.

The second of these Polar bears was shot on April 10th this year, and if humanity had had its proper influence—but the delay was mine—it would have ended its days sooner, and been saved the terrible sufferings I fear it endured. I think there can be no question that animals in their natural state are more mercifully dealt with than in captivity. As soon as an animal ceases to be able to procure its food—when it cannot work for its living—its life must only be a question of time. In captivity we feed them, or supply them with food. They may occasionally recover, which they would not have done in their native state; but very often we prolong the agony for them. Let us hope they do not suffer as acutely as we think they do. This bear had been falling off for some time—I dare say for Polar bears it had reached a good age—but cod-liver oil, brown bread and butter, and other delicacies had probably prolonged its existence; but it got worse and worse, looked ill and wretched, and either could not pass water properly, or else had a distended bladder, with dribbling of urine. I think the day it was killed I never saw agony of pain so depicted in any animal. It seemed maddened with suffering. We determined to have it shot, and came to the conclusion that a good charge of heavy shot discharged close to the animal would be a more effective way than by bullet. A second gun was provided in case of need, but the first shot at the distance of a foot just behind the right shoulder soon settled her. The *post-mortem* showed that the pulmonary artery had been torn through and caused extensive hemorrhage into the lungs. The bladder had ruptured,

and the urine had passed out into the abdominal cavity. All the tissues seemed soft and rotten. The kidneys were large and divided into twenty or thirty lobules.

Some years ago a young lion, four and a-half months old, was found dead in its cage. For three or four days it had been ailing; its breathing was very quick, and it took no food, merely lapping a little water. A *post-mortem* examination made seven hours afterwards revealed a pericardium full of semi-purulent fluid, of the consistence of gruel and coloured by admixture with a little blood. Probably it had had pericarditis, and the inflammation had gone on to the suppurative stage.

It is possible that the disease might have been pyæmic in origin, for about this time a female cheetah, which had been in the Gardens about two years, died after about a month's illness, and after its death we found an empyema on each side, more especially the right one. The pus was of a corn-flour custard consistence, and on the right base was becoming organised into membrane. Both lungs were much compressed; the liver was congested and softened, but did not display any purulent foci; the kidneys were congested, and the skin had an unusual yellow tinge. The illness commenced with sickness and diarrhœa, followed by much wasting, with destruction of the right eye from sloughing of the cornea.

The felidæ are very prone to inflammation of the lungs. Almost every *post-mortem* examination upon them gives evidence of this, either as a recent condition or as having occurred at a more remote period. On July 10th, 1889, a male cheetah died of inflammation of both lungs, more especially the right one, and then a few days afterwards a female died; and I have several other records.

Whilst on the subject of empyema, I may mention the case of a Mona monkey which died in November, 1891, after an illness of rather more than two months. It was paraplegic nearly the whole of the time, and dragged its legs after it in a very ludicrous manner. It fed well, and except for the paralysis seemed fairly happy and comfortable. It had a swelling on the right side just below the ribs. I had the monkey taken out of the cage, and examined this swelling

very carefully, and came to the conclusion that it was a fatty tumour and harmless. The *post-mortem* examination showed that an error had been made in diagnosis, for the swelling turned out to be a collection of pus in connection with an empyema of the right pleura. It is possible that puncturing the tumour, in the first instance, might have cured the paraplegia and the empyema. I say *might*, because monkeys are very bad patients; it is almost impossible to keep any kind of dressing or application upon them.

Monkeys are very liable to chest affections; and there is no question that we have lost a great many—some ordinary specimens, and some rare and of considerable value, as chimpanzees and ourangs—from tuberculous disease of the lungs. They seem very prone to pleurisy, and adhesions are frequently found, with and without tubercular masses in the lungs; but actual cavities from ulceration do not seem very frequent. The condition of two female chimpanzees was interesting, but very distressing; and I feel sure the insanitary condition of their house at that time had much to do with their illness. Whether they were related in blood, I am not sure; but they certainly were like sisters in affliction—and in affection, too. The melancholy solicitude which they showed for each other was really remarkable. The elder one, probably between two and three years old, died first, after an illness of some weeks' duration; she was seriously ill for about six weeks. At first she had troublesome diarrhœa, and then cough with rapid wasting succeeded. Her appetite became very bad—no food, fruit, or prepared milk seemed to entice her. Sometimes she would eat a few bananas; and for several days before her death took nothing else. Topsie, her younger companion—at this time in good condition,—used to watch her, and cuddle up to her in the most human and kindly manner; and when the cough was troublesome, Topsie would look deeply and appealingly distressed, as much as to say, "Can't you do anything for my friend?" The end came at last, on the 21st July, 1889; and the *post-mortem* examination showed much solidification of the right lung, enlargement of the bronchial glands, and the presence of tubercle bacilli. In rather less than two months afterwards (September 9th) Topsie

herself succumbed, after having been ill for little more than a month. She coughed and wheezed very much, very like a little old woman; she had only slight diarrhœa.

I have many more particulars about the results of the autopsies, but I must not dwell on them. Let me, however, emphasise this point, that we lost in the course of a few years a great many monkeys, and they nearly all had undoubted symptoms of tubercular disease. Monkeys seem particularly obnoxious to the tubercle bacilli; I should say more so than any other animals I have noticed. There is no doubt that the monkey-house became very unhealthy, and the excessive mortality was only stayed by putting the inmates elsewhere, and thoroughly disinfecting it with sulphur. This procedure has been carried out from time to time with most satisfactory results.

Some years ago we used to possess two very fine giraffes: but now it is impossible to procure giraffes; in consequence, it is stated, of the disturbances in the Soudan, they cannot be got down to the coasts. Very large sums of money have been offered for them by zoological gardens abroad, but without results. One of our giraffes suffered from what appeared to be chronic rheumatism of the joints, chiefly those of the fore-legs; and he would hobble about in a very gouty, ludicrous manner. He was sent off in exchange for some other animals, and then died shortly after. The other lived for only a few months afterwards; dying after a short illness from congestion of the lungs, which were somewhat emphysematous, and contained some old cheesy-looking nodules. There were two small uric-acid calculi in the left kidney; the liver was soft, and the stomach greatly distended with food, by which the diaphragm was pushed up, thus impeding the action of the heart and lungs.

On several occasions this distension of the stomach has been found, arising from the practice of feeding the animals with dainties, &c., which they would not have in their natural state, and which they are doubtless, when in this weakly condition, better without. It may interest some of you to know that, absurdly long as the necks of giraffes are, they have only

seven cervical vertebræ--they look as if they might have forty. These animals are becoming very scarce; and I question very much whether there is a living one now throughout the British Isles or on the Continent.

Whilst on this subject of stomach distension, it seems very appropriate to relate the following cases:—

It is not at all an uncommon thing to find in the stomach of seals quantities, even large quantities, of stones, gravel, and pieces of rocks, rounded off, which have evidently been in the stomach for a very long time. This condition is found in the sea-lions, or Cape seals, to a more marked extent than in ordinary seals. I have the notes of a case where ten pints of stones, weighing twenty-two pounds, were found. The explanation of the reason does not seem very clear. The stones are doubtless swallowed; but for what purpose? The tradition amongst the seal hunters is this—that when the seals get very fat, they cannot sink themselves in the deeper water with the same facility as when they were thinner, and so they take in the stones as ballast; and the stomachs with their strange contents are locally known as "ballast bags." The theory is a very pretty one, almost romantic; but I don't think we can accept it. I collected a good deal of information about this subject some years ago, and embodied the results in a paper I had the honour of reading before the Bristol Naturalists' Society. I think that probably there is a physiological reason. Last year, in April, a very fine Cape ostrich, the survivor of two we had in the Gardens, began to ail very seriously. He had been falling off in appetite and flesh for some time, and, in spite of every care and attention, died on April 10th. The gizzard and stomach were enormously distended, the contents consisting of about eight or nine pounds of cabbage leaves, young grass, Indian corn (which had been boiled), remnants of brass buttons, buckles and safety-pins, pieces of glass and metal, a pen-holder and two pocket-handkerchiefs, with a tell-tale name upon one, a memorandum book with a druggist's label upon it: such things, however, and pieces of money are usually found in these birds' stomachs, and consequently they may be naturally regarded as objects for use in digestion. These

evidently were not the main cause of the dire dyspepsia the poor bird had; oh, no! this was the thing—the remains of a Prayer Book, with the thirty-nine articles, undigested!

Tumours occur amongst the denizens of the Gardens; but they are not common. In February, 1890, died the last of several Crimean geese. It was considered to be the oldest inhabitant of the Gardens, having been there since about 1856 or 1857. The feathers of these birds always looked as if they had been ruffled the wrong way, curled something like Japanese chrysanthemum flowers. The abdominal cavity contained a large fibroid mass of at least one pound in weight, and apparently connected with the mesentery. It certainty was not a fatty liver; for the bird was very thin, and looked as if it had long ago consumed all such material as fat.

Some months afterwards (December 5th, 1891), Mr. Budgett, of Stoke Bishop, gave us an old mare to be slaughtered for the carnivora. On opening the abdomen, an enormous tumour (fibroid) was found connected with the uterus; and this is in the museum of the Medical School, I believe.

The oldest inhabitant of the Gardens now is the griffin vulture. For years this bird has had an exostosis on the right foot. It does not get any larger; but it cripples the bird a little, and makes it hobble rather than hop about.

Towards the end of last year, a black constrictor snake—Bascanion constrictor—was noticed to have a swelling on its body a few inches from the tail, and which had gradually increased in size, and was evidently tormenting the reptile, because instead of being very lively, it began to move about carefully and cautiously, and twined itself round a dead branch in its den with great circumspection and avoided pressure upon the swelling. So, on January 24th last, I got the keeper (Keeler) to assist me. He very adroitly, with the aid of a duster, seized the snake at the back of its neck, and brought it out of the cage. The tumour was situated close to the cloaca; it was as large as a small walnut, very tense, fluctuating, and certainly very painful on pressure. I had no instrument with me except a knife, so I used a blade of this, and with it opened a kind of fæcal abscess, as very offensive matter spurted out. Great relief followed;

but after a few days it was evident the mischief was not eradicated; so on February 12th a more careful operation was performed, when some fishy-smelling matter was evacuated, and then a small tent of boracic lint was placed in the wound. Eventually the wound closed. The snake has cast its skin several times since, and although I can make out a small swelling, I think the cure is a radical one.

Whilst on the subject of snakes, and especially those of the python kind, which have the reputation of being able to exercise great powers of fascination over their victims, I may say that I have watched these snakes feed on a great many occasions, and I have come to the conclusion that they have no "fascination power" whatever. I have seen ducks and fowls placed in the pythons' cages (they have a strange preference for ducks), and except for the consternation that may affect any creature when suddenly placed in new surroundings, the intended victims could not well be less disturbed in their behaviour, if the inmate of the cage had been one of their own kind instead of a stony-eyed huge snake. By-and-by they settle quietly down; and I have seen ducks and fowls actually perched upon the coiled-up body of the serpent, and rabbits hopping about in the most unconcerned manner. Of course this condition of things presupposes that the snake is not very voracious, otherwise he would probably make a dash and a great coiling-up of his prey at once. But we will conclude he is not in this humour—what happens? I have seen the snake push out his head, and a duck peck at it—nay, even induce the snake to beat a retreat from the provoking beak. And often and often in the morning when the keeper has come again, there has been no murder committed; but it may be that three or four ducks or fowls, or a rabbit or two, have entirely disappeared between closing time and the morning. I need hardly explain that the snakes are always fed after the houses have been closed to the public. What usually happens is this: the snake and its victims fraternise, touching each other every now and again, apparently on good terms; when, without any change so far as observation goes, the snake suddenly, as rapidly as the twinkle of an eye, seizes its victim

and encoils it, and then after a short time commences the slow process of gorging itself. Imagine a person on apparently very friendly terms with you, talking to you and engaging your attention, and then suddenly, without any evident change of mind, striking a dagger, which had been concealed in the sleeve, into your heart or back. This is practically what the snake does, and it is the most subtle act I have ever seen: it is devilish subtlety, but it is not fascination.[1]

One word more about their feeding. Pythons certainly are very irregular feeders, and will go a much longer time without food than one would imagine. One large python celebrated Christmas-eve, 1888, by taking a duck; its next meal was on the following June 21st, when it devoured another duck, and then afterwards fed regularly about every week for some time. Another python lived for eighteen months without food; but then it died. Signor Succi and Dr. Tanner, and other celebrated fasters, may bow their heads to the snakes.

I have come across various worms from unexpected sources. A python would hardly be regarded as a host for them, yet one of our pythons last year passed two ascarides lumbricoides and a large portion of a tænia, which I have not yet been able to specialise. It is neither solium nor medio-canellata. The common English snakes not unfrequently have passed lumbrici; but one might have thought the very strong digestive juices of the python, which can dissolve the feathers of ducks and fowls and the skin of a rabbit with its fur, would have proved too much for tænia development.

On April 20th, 1891, a female rhea (American ostrich) died, after falling off in health for some time; and in each pleural cavity was a nest containing a large number of long cord-like worms—one measuring two feet one inch—and which at the time I considered were lumbrici, but which I now believe are really filariæ, the Guinea worms.

On September 1st, 1879, a very fine male lion, General, Hannibal's son, died after a short illness. The *post-mortem* exami-

[1] Since delivering this address, I have seen Hagenbeck, the celebrated menagerie-keeper of Hamburg, who is constantly receiving snakes from all parts of the world. He is a very acute observer, and he ridicules the "fascination" theory.

nation made a few hours afterwards showed a large quantity, several pints, of sanguineo-serous fluid in the peritoneal cavity, an intensely congested appearance of the peritoneum itself, which was almost black with venous engorgement, and there was a very little lymph deposit. The serous coat of the stomach was congested in patches; but the walls were thick and firm. On opening the viscus, there was a small quantity of greenish-looking fluid, and some partly-digested food; but from every fold of the mucous membrane rose up, in hydra-looking fashion, numbers of round worms, from one inch to three inches in length. I never saw such a sight of its kind: there must have been at least a hundred. The duodenum contained a few; and I thought possibly the peritonitis had been set up by some escaped ones, but careful examination did not confirm this.

On November 9th, 1889, a female leopard, which had been born in the Gardens, died when it was ten months old. It had always been rather weakly. The *post-mortem* examination showed a large number of small lumbrici in the stomach. Many of the animals have suffered at times from ascarides lumbricoides, and santonine has been given with very good results.

On May 28th, 1893, Hannibal II. died. He was born in the Gardens, and passed his life of sixteen years within an area of about twenty yards from his birth-spot. He had always been remarkably healthy, and was probably the most magnificent black-maned lion ever seen in Europe. He is perhaps almost immortalised by having been the subject of a very fine and excellent photograph by Gambier Bolton. For several weeks before his death he had been ailing, took less and less food, lapped water occasionally, became miserable and mangy-looking, and was fast losing his glorious mane. The *post-mortem* examination showed a very remarkable absence of fat—he had used it all, perhaps, in lieu of food—congested liver and lungs, and some cysts in the liver, containing clear fluid, but no hydatids. Senile decay was my verdict.

Then on January 6th this year (1894) old Jupiter died. We have seen his birth, his claw-extracting, and now we come to the conclusion of him. He was born, and he died, in the lion-house. He had been a healthy animal upon the whole; but

had had attacks of indisposition at various times. For the last several years he and the stump-tail lioness had occupied the same den—except at meal-times, when they were always separated—and they went by the names of Darby and Joan. She still survives, and is now older than he was, and she still looks a very green and hearty widow, especially when her fifty-six cubs, which she has had, are taken into the reckoning. Her coat is a splendid fawn colour, and I do not see why she should not live many more years. Lions used to be kept in the Tower of London, and one named Pompey is said to have lived there seventy years. I cannot believe it. Joan looks as if she might continue, as I said, for some years; but she is not likely to reach thirty years of age. But to return to old Jupiter. He grew worse and worse, and became shabbier and shabbier-looking. At last he was condemned by the Committee to be shot. The execution of the sentence was delayed, and one Saturday night he anticipated his despatch, which was to have been on the Monday, by dying in his den. The *post-mortem* examination gave evidence of very shrunken lungs, with carnified bases; enlargement of the liver, which weighed 9½ lbs. and contained cysts with hydatid contents; enlarged thyroid, and intestinal mischief. The spleen and kidneys were normal; the heart was large and flabby. Mr. Morton very kindly examined the viscera for me, and his notes are: "In the lower part of the ileum, just above the ileo-cæcal valve, there is a bossed outgrowth into the lumen of the bowel, infiltrating its wall. It does not greatly obstruct the lumen. The ileum above the growth is enormously thickened, but not dilated. Sections of the growth showed in some areas the structure of columnar epithelioma, and in the thickened wall above much round-cell infiltration and fibroid growth."

We may have massive patients and "claimants" upon our attention sometimes; but I can assure you when you come to treat an elephant, you feel very small indeed. Our lady one in the Zoo is now thirty-two years of age, and is supposed not yet to have reached maturity. She has been in the Society's possession for about twenty-seven years, and she has very seldom ailed. About the end of June, 1890, however, she began to be

very unwell, whether from cold or some sexual disturbance it is difficult to say; but her skin became very wrinkled, and her trunk hung down in the most listless manner. She almost entirely refused food and even water. The ears and trunk felt very cold, and her eyes were dull and the conjunctivæ congested. What could be the matter? What medicine ought she to have? Calomel, jalap, or both? Ammonia or other stimulants? The treatment was really "expectant," and slowly she recovered; but she had several wretched days. She would lie at times on her side, with her head resting on the straw, and she would move her tail about in a very funny and despondent manner. Boiled rice and sugar, and gruel and treacle (their turtle soup), which elephants like much, were both objectionable, and the first food she took with any relish was composed of buns, gingerbread, and jam tarts. Then she got on to young carrots, especially their green tops, and afterwards completely recovered. Just lately she has had a kind of whitlow or fascial abscess on a toe of the right fore-foot. We think she must have injured the part, in the first place, by striking it against some spikes placed to guard the doors from her kicks. Hot fomentation and bran and linseed poultices relieved her, and encouraged suppuration, which took place. She walked about in a very lame manner; but now she seems almost well. I thought it would be interesting and novel to listen to the heart-beat of this huge quadruped. A horse's heart beats about thirty or forty times in a minute, and I expected an elephant's might be even slower. I expected to hear and feel a regular sledge-hammer pulsation; but, to my astonishment and disappointment, place my stethoscope where I liked—on the front of the chest, on either side, beneath, between, and behind the fore legs, and in the axillæ—not a sound could I hear, nor could I feel a pulsebeat anywhere. I don't know the anatomy of an elephant, and it may be that the heart is placed deeply and centrally in the chest cavity. The behaviour of the patient was very amusing. Of course her keeper was present. She was very quiet and docile; but she evinced a curious nervousness. A vibratory noise emanated from her trunk, and every now and then she would very lightly flick the stethoscope with

the end of her trunk. I can assure you I never felt so ridiculous in my life as when I stood by her huge body and placed a pigmy instrument upon her thick skin.

I have trespassed upon your patience, I am sure, too long. If I have not imparted to you much information, I hope I have not altogether failed to interest you. The great German poet, Goethe, said, "When I observe the luminous progress and expansion of Natural Science in modern times, I seem to myself like a traveller going eastwards at dawn, and gazing at the growing light with joy, but also with impatience; looking forward with longing to the advent of the full and final light, but, nevertheless, having to turn away his eyes when the sun appeared, unable to bear the splendour he had awaited with so much desire." We are all waiting for this full fruition of light; and if I have advanced you and myself this evening one iota towards this desirable prospect, my effort, which has been accompanied with much pleasure to myself, and which you have received with such patient endurance, will not have been in vain.

CASES OF SENILE NERVE DEGENERATION RESEMBLING GENERAL PARALYSIS.

BY

S. W. MacIlwaine, M.R.C.S. Eng., L.R.C.P. Lond.

The desire to define a disease by giving it a name and sharp boundaries is natural, especially among those who devote their attention to some particular group of diseases. The result in the case of General Paralysis, as in many others, seems to me to be of very doubtful utility.

No doubt it is easy to select cases in an asylum which will form a well-defined group under the name of General Paralysis; but when one has to watch all cases which present themselves in general practice, the boundaries are not at all so easy to maintain. The following cases will serve to illustrate this:—

Case I.—Farmer, æt. 75. First epileptic attack occurred

nearly twenty years ago: almost complete intermission of symptoms followed for twelve years; then more and more frequently recurring attacks, with mental and bodily breakdown, ataxia, tremors, unequal pupils, transient albuminuria, delusions, hallucinations, maniacal excitement, with gradual and almost complete extinction of mental and bodily power. In this state he now remains, violent epileptic attacks occurring at intervals of from six weeks to three months.

Case II.—Shopkeeper, æt. 79. Failure of business capacity about fifteen years before death, change in handwriting, loss of memory, prolonged fainting fits; and during the last five years very gradual extinction of all muscular and mental power, wasting, rigidity and contraction of muscles, mental oblivion, retention of urine, cystitis and bedsores.

Case III.—Farmer, æt. 63. History of fainting fit six years ago; first seen eighteen months ago for headache, general weakness and despondency. Tremor of tongue and lips very marked, otherwise nothing amiss discoverable; mind, speech, gait, reflexes, sensation, urine, and optic discs normal, but prognosis clearly bad. Six months later suddenly attacked with aphasia, lasting half-an-hour and followed by hemiparesis; several similar attacks have occurred since, and there is now general muscular weakness with some ataxia and loss of memory. There has been transient double vision.

Case IV.—Shopkeeper, æt. 88. Mental and muscular failure more marked than in normal old age. Had been for many years subject to attacks of prolonged and absolute loss of consciousness, not accompanied by convulsions or followed by hemiplegia. Fifteen months before death there was a violent epileptic seizure, followed by hemiplegia; this quite cleared up in a few weeks, but general mental and bodily power was much impaired. After an interval of eleven months a similar attack occurred; paralysis again cleared up, but left patient on a very low level. After a few weeks an attack of transient aphasia, without convulsions, occurred; and after a similar interval another epileptic attack, followed by coma, Cheyne-Stokes respiration, and death.

Case V.—Farmer, æt. 91. A case of almost normal old age till five years or so before death, when peculiar attacks first

occurred, at long intervals, in which there was very marked cyanosis, with a feeling of faintness. Senility advanced more rapidly since then, especially during the last twelve months, and in the last six weeks of life several epileptic attacks occurred; finally, four came on in quick succession, followed by coma, Cheyne-Stokes breathing, and death.

IV. and V. were brothers.

These cases would clearly not come within the pale of general paralysis, according to most writers on the subject; at the same time, I cannot see how general paralysis is to be fairly defined so as to exclude them. Do they not form in fact a series of links or stages between the typical general paralysis of the asylums and normal old age?

There is an observation in Wilks and Moxon's *Pathology* that has not attracted the attention it deserves in this connection. The authors there state that "it is difficult to say in what respect the morbid changes found in the brains of general paralytics differ from those which naturally occur in old age." This means that in reaching a state of ordinary senility there are agencies at work which by slow degrees and without marked symptoms produce, in the course of many years, organic changes in the encephalon indistinguishable from those produced in a couple of years by general paralysis.

The normal oscillations of the cerebral circulation between rest and activity require many years to produce the thickening of membranes, &c., that the terrible congestive waves corresponding to the exaltations of a typical general paralytic can produce in less than three years; but the pathological results are indistinguishable. Are we not justified, then, both on clinical and on pathological grounds, in looking on general paralysis as a premature and rapid senility, rather than as a specific disease? If this is so, may we not hope that it may be possible to recognise a functional stage of general paralysis in which the abnormal congestive attacks may be prevented, and their inevitably fatal organic consequences be forestalled and averted? Indeed, every one can recall cases where it is at least reasonable to suppose that a well-timed holiday may have saved the overwrought city man from general paralysis.

Progress of the Medical Sciences.

MEDICINE.

We have recently had a very important paper on the treatment of pneumonia from Dr. D. J. Leech.[1] He deals with the question, how far the teaching of experience may be trusted, or whether we should not be guided by our knowledge of the pharmacological influence of remedial agents in the conditions which are present. After an analysis of the statistics of general hospitals, of the Army Medical Reports, and of the records of individual experiences of practitioners, he points out that none of these statistics prove the value of any one treatment, and that remedies very opposite in character may under different conditions do good. The tendencies of the ailment manifestly vary with time and place; and these tendencies, as well as the symptoms present, should be carefully noted, and should guide our treatment. He concludes as follows: "Finally, it is evident that exactness, full details, and a record of associated circumstances are necessary to make pneumonia statistics useful. The value of the older data is greatly diminished by their bareness; but it was impossible, in former days to give that information which is now easy to record, and which there is good hope will accumulate and lead us to more definite views concerning treatment. It may, indeed, be impossible to show by figures the precise advantages and disadvantages of every method of treatment; but we may surely hope that with the aid of increased knowledge as to the effects of remedies which exact observation must give us, the time will come when we shall not have to report a hospital death-rate from pneumonia of one in 3.2 to 3.9 in those over fifteen years of age."

Of the individual methods of treatment analysed, the most noteworthy of the modern modes is that advocated for ten or twelve years past by Petresco, of Bucharest, who professes to "jugulate" pneumonia by large doses of digitalis. The results he gives are more favourable than any hitherto recorded, and show that, under the special circumstances mentioned—viz., among young soldiers at Bucharest,—deaths are extremely rare when digitalis is given in enormous doses. In 1891 he had treated 825 cases, with a mortality of 2.06 per cent.,[2] and in 1893 he claimed to have treated successfully 1,061 cases during the last twelve years.[3] He gives one to three drachms daily of digitalis leaf in infusion (3j. in ℥viiss.), a table-

[1] *Med. Chron.*, Sept., Oct., 1894. [2] *Therap. Monatsh.*, Feb., 1891.
[3] *Rev. de Méd.*, Mar. 10, 1893.

spoonful (nearly four grains) being given every half-hour. The strength of our British infusion is twenty-eight grains to ten ounces, so that the drug is rarely given in doses approaching those which are found by Petresco to jugulate the malady in three days, fever and physical signs alike disappearing as by enchantment. Numerous observations by other physicians tend to corroborate results which, according to Dr. Leech, are, and pending further information must remain, a puzzle to us; but the specific curative influence claimed by Petresco is not accepted, although there is a general consensus of opinion that digitalis is more or less useful in counteracting the tendency to heart failure, and that it may safely be given in doses far in excess of those admissible in cases of valvular disease. This question has long been *sub judice*, and seems likely to continue so until the details given by Petresco are faithfully carried out: where he has led the way, careful observers in hospitals need have no fear to follow.

I have often been astonished to find how little effect digitalis, in what are commonly considered to be full doses, appears to have in modifying the natural history of pneumonia, and I have never had the good fortune to see anything which could be spoken of as "jugulation," although half-ounce doses of the English infusion have been given every hour for the whole twenty-four hours. It cannot be difficult to decide the question which Petresco has put so definitely before us; if his statements are confirmed by other observers under varying surrounding conditions, we should hear no more of the folly of trusting to Nature in the treatment of so fatal a malady as pneumonia has hitherto proved itself to be.

* * * *

Functional conditions of the heart are attracting much attention, and in connection therewith the subject of thyroid feeding is of importance.

The results of the treatment of myxœdema by thyroid feeding have been already summarised in this *Journal*.[1] This has now long passed the experimental stage and has become a matter of daily routine; but the experimental process has gone astray in various directions, and we find that thyroid preparations are being given in a variety of maladies without rhyme or reason. It is scarcely possible just now to read through a medical journal without finding some reference to the use of thyroid extracts or tabloids in cases of exophthalmic goitre; and it is inferred that because one case of this kind has improved under observation, that the treatment is not only justifiable but has proved itself to be useful. Theoretical considerations would tend to indicate that in cases of thyroid enlargement the use of thyroid preparations should be carefully avoided, and the fact that these cases are not always made worse but sometimes get

[1] Vol. xi., 1893, pp. 32, 255.

better in spite of the treatment tends to show how much the phenomena of Graves's disease are of the functional and temporary character. Various papers on exophthalmic goitre, more particularly those of Arthur Maude, have thrown fresh light on the pathology of the malady, and tend to indicate that a general implication of the nerve centres by some such toxine as is produced by the enlarged thyroid is probably the cause of the diffused and varied phenomena of the disease; that, in fact, the thyroid is probably the *fons et origo mali*, and is the organ to which curative rather than palliative measures of treatment should be directed. He concludes one of his papers as follows: "Pathologists have long sought to explain the phenomena of this disease by some focal lesion in the sympathetic or the medulla. But as our clinical knowledge grows, the more unsatisfactory such explanations become. The old sympathetic theory died hard—killed by Filehne and Dr. Hale White; but will any lesion in the medulla do more than explain the cardio-vascular symptoms? I think not. We must regard the neurosis as a nerve poisoning for the present: the brunt undoubtedly falls on the medulla, but it is felt from the cortex to the periphery. What that poison is we do not know. That there are probably secondary poisons, I have indicated. But remember the one feature, so peculiar to the disease, the thyroid change. To my mind, the universal goitre, the connection with myxœdema, the results of operations on the thyroid, point to that gland as the fountain-head of evil."[1]

There is a widely-spread and growing belief that the neural and cardiac phenomena are due to the explanation given by Greenfield and Maude, that of a production (or non-elimination) in the thyroid itself of some toxine, which acts on the whole nervous system even to the peripheral nerves, though the brunt of its action falls on the vaso-motor centres of the medulla and some neighbouring centres. The question of the exact *rôle* played by the thyroid change is difficult; it is clear that all morbid changes in the thyroid are not operative to produce Graves's disease, but all the cases (in which the gland has been properly examined) show two common factors: cell proliferation and diminution of colloid.[2]

This question was fully considered by Dr. Greenfield in his Bradshaw lecture,[3] and the antithesis of the clinical phenomena of myxœdema and Graves's disease was there commented upon.

The tachycardia of Graves's disease, being due to the presence of a toxine produced by the thyroid, naturally suggests the question whether other forms of functional heart-disturbance may be due to similar causes. The discussion on functional diseases of the heart, introduced by Dr. Douglas Powell, at the annual meeting of the British Medical Association in Bristol, did not elicit any further facts in this direction; even in cases

[1] *Tr. M. Soc. Lond.*, vol. xvii. [2] *Brain*, 1894.
[3] *Brit. M. J.*, 1893, vol. ii., p. 1261.

of paroxysmal tachycardia, the neurosal origin of the condition known as "runaway heart" was the only one suggested, but it is difficult to dissociate cases of this kind from the slighter forms of Graves's disease.

The discussion commenced with a very complete summary by Dr. R. Douglas Powell, who gave an excellent outline of the varieties of cardio-vascular hyperæsthesia, and of paroxysmal and sustained heart acceleration and retardation; and this was followed by a paper on the irregular heart of influenza, by Dr. A. E. Sansom. It appears to be generally admitted that in the treatment of the irregularity, as well as of the tachycardia, all cardiac tonics are singularly inefficacious. Digitalis has proved not only useless, but harmful. Belladonna seems to have given somewhat better results. Dr. Sansom has found the galvanic current to the vagus to be the most effectual method of controlling irregularity; but he admits that there is seldom much amendment under six months, even when the applications are made for six minutes three times a day. We fear that most medical men would tire of employing so slow a therapeutic agent as this, and most patients would be weary both of it and the doctor long before the beneficial effect could become obvious. My own attempts at galvanisation of the vagus or sympathetic (or as it most commonly must be, both simultaneously, or neither) have not given much encouragement to persevere in a course which seemed to be altogether ineffectual.

The demonstration by Dr. Frank J. Wethered of the treatment of chronic diseases of the heart by baths and gymnastics, as practised by the brothers Schott at Nauheim, opens up a far more promising field of heart therapeutics. The "terraincur" of Oertel has shown itself to be of use, although the system of graduated exercises in place of rest has not been generally accepted by the profession in this country. Schott's plan of giving exercises, or "movements with resistance," has, according to Dr. Wethered, given astonishing results. Each exercise is made extremely slowly and regularly, and is resisted by the doctor or trained attendant, who carefully regulates the degree of resistance in accordance with the condition of the patient.

The effect of this method of treatment has been marked: the pulse becomes more regular and its volume increases, the rate is also diminished, and the area of cardiac dulness after half-an-hour's exercise is found to be diminished to an astonishing degree. These are facts dependent simply on the observation of the attendant; but the improvement is also marked in the general condition and reports of the patients themselves. Dr. Schott is of opinion that all forms of heart disease may derive benefit from this treatment, with the exception of cases of aneurism and those in which there is an advanced degree of arterio-capillary fibrosis with high tension; and in Dr. Wethered's opinion the benefit has not been overestimated.[1]

[1] *Brit. M. J.*, 1894, vol. ii., p. 1045.

The following tabular recapitulation of the treatment of "the senile heart," given by Dr. G. W. Balfour, is likely to be of service[1]:—

In every case careful removal of *lædentia*.

Precordial Anxiety.—Careful dieting; cardiac tonics; rest at first, afterwards regulated exercise.

Intermission and Irregularity.—Careful dieting; vascular stimulants, combined with cardiac tonics; sedatives, especially for women about their climacteric, occasionally hypnotics; antacids and anti-arthritics; assafœtida (pil. galbani co.); moderate exercise.

Palpitation.—Antacids; stimulants; mustard over precordial region; hot foot-baths. In interval strengthen patient by open-air exercise, good food, and such tonics as may seem needful, especially iron.

Tremor Cordis.—Careful dieting most important; antacids; anti-arthritics; *pil. galbani co.*

Tachycardia.—Careful dieting; in recent cases following cardiac overstrain, belladonna, or atropine, must be pushed till pupils dilate. In cases of poisoning by tobacco or alcohol, tonic doses of digitalis useful. Cardiac tonics, especially digitalis and arsenic, continued for a long time in moderate doses, supplemented by hypnotics at bedtime, especially morphia. Digitalis most useful in vagus paralysis, morphia in affections of the sympathetic. Cholate of soda slows the pulse, but it destroys the blood corpuscles, and the benefit is thus a doubtful one. Antipyrine has been recommended theoretically. Faradization of the skin over the *precordia*, or of the vagus nerve; or the skin or vagus may be galvanized. Compression of the vagus. Forced inspiration, holding the breath as long as possible. Ether sprayed along the cervical spine. A chloroform poultice over the precordial region.

Bradycardia.—In the hemi-systolic variety, cardiac tonics, especially digitalis. In true bradycardia digitalis is also indispensable, to maintain the elastic tonicity of the heart, and to enable the heart to cope with the exceptionally high blood pressure prevalent during part of the systole.

Delirium Cordis. — Careful dieting, vascular stimulants, cardiac tonics, antacids, and anti-arthritics.

Angina Pectoris. — During the paroxysm, nitro-glycerine, nitrite of amyl, chloroform and morphia. During the interval most careful and abstemious diet, especially towards evening. Vascular stimulants in combination with cardiac tonics, especially arsenic. Exercise is to be avoided, and only undertaken when duly prepared for by the ingestion of some vascular stimulant.

R. Shingleton Smith.

[1] *The Senile Heart*, 1894, p. 292

SURGERY.

The surgery of the ureters, which is one of the most recent triumphs of surgical art, forms the subject of an able article[1] by Dr. Christian Fenger, in which the various operations which have been performed on these ducts are briefly considered. The ureter can be reached by the trans-peritoneal and the extra-peritoneal routes; but other things being equal, the latter method, in spite of the greater difficulty arising from the depth of the wound, should be adopted, as the risk of peritonitis is thereby avoided. The intra-peritoneal operation is best carried out by means of a median or lateral abdominal incision, by which the entire course of the ureter can be reached: the extra-peritoneal method differs according to the part of the ureter requiring operation; the upper two-thirds being accessible by a continuation of the ordinary oblique incision for lumbar nephrotomy from the twelfth rib downwards along the ilium and Poupart's ligament to about the middle of the latter, the lower third or pelvic portion being reached by a lateral sacral incision as proposed by Delbet,[2] or better by Kraske's[3] operation, or the osteo-plastic resection of the sacrum as proposed by Cabot.[4]

Accidental wounds and subcutaneous ruptures of the ureter have not yet been dealt with surgically. The reason for this is that diagnosis cannot be effected sufficiently early, owing to the uncertainty of the symptoms; for hæmaturia may be slight or absent, and swelling from the accumulation of extravasated urine is not seen for one or several weeks after the injury. It will be advisable, however, as soon as the diagnosis can be made, or when lumbar opening of a peri-ureteral cavity containing urine is made, to look for the seat of rupture and endeavour to restore the continuity of the tube.

Stones in the ureter are generally arrested in the upper portion, and with about equal frequency in the middle and vesical portions. According to their position they can be removed:— (*a*) Through the bladder by dilatation of the female urethra, or by suprapubic cystotomy; in short, so far as operation is concerned, they may be classed among stones in the bladder. (*b*) Ureterotomy through the rectum.[5] (*c*) Ureterotomy through the vagina.[6] (*d*) Extra-peritoneal ureterotomy.[7] (*e*) Intra-peritoneal ureterotomy.[8] The locality of the stone has only been diagnosed before operation in the cases in which the stone was afterwards removed through the vagina or rectum. Extra-peritoneal ureterotomy for stone has been done in five cases, all of which were successful; and of two cases treated by the

[1] *Ann. Surg.*, vol. xx., 1894, p. 257.
[2] *Ann. d. mal. d. org. génito-urin.*, 1891, p. 246.
[3] *Ann. Surg.*, vol. ii., 1885, p. 415. [4] *Am. J. M. Sc.*, vol ciii., 1892, p. 43.
[5] *Riforma med.*, Sept. 5, 1887. [6] *Boston M. & S. J.*, Dec. 25, 1890.
[7] *Chicago M. Recorder*, March, 1893. [8] *Lancet*, 1890, vol. ii.

intra-peritoneal method, one was successful and one died from peritonitis. Fenger therefore argues that uretero-lithotomy by the extra-peritoneal route is a safe operation. The wound heals without stenosis; and suturing is unnecessary, for deep drainage of the wound is sufficient. Intra-peritoneal ureterotomy should be done only when access outside of the peritoneal cavity is impossible, and should be completed by careful suturing, covering with a peritoneal or omental flap, and drainage. Opening the peritoneal cavity for diagnostic purposes may occasionally be necessary, and when this has been done the abdomen should be closed and the stone removed through an extra-peritoneal incision. Operation for valve-formation (which always causes an intermittent or permanent impediment to the flow of urine, leading to hydro- or pyo-nephrosis) is best effected by the extra-peritoneal lumbar incision. The dilated pelvis or hydronephrotic sac is easily found and opened by a longitudinal incision. If the opening of the ureter into the sac cannot be found, it may be located by incising the ureter below the sac and passing a probe upwards towards the pelvis. The valve or inner wall of the ureter, running in the sac, is now divided longitudinally from the opening in the sac, and the resultant wound treated in one of the following ways: (*a*) By turning the flaps out and uniting them to the inner wall of the sac by sutures (Trendelenburg).[1] (*b*) By drawing the corners of the longitudinal incision together with one suture, transforming the longitudinal into a tranverse wound (Fenger).[2] (*c*) Uniting the wound longitudinally with numerous fine silk sutures, avoiding the mucous membrane (Mynter).[3] The cases recorded by Fenger and Mynter were successful. Compression of the ureter for diagnosis of kidney affections has not been attended with any degree of success, and has been replaced by catheterisation.

Catheterisation of the ureters from the bladder has reached a state of practical usefulness only in women, and has occasionally given valuable information affecting the decision for or against operation on the kidney. In man, however, catheterisation is practicable only through epicystotomy; but as the mortality of this operation is steadily decreasing, the procedure may be said to be justifiable in selected cases. Ureteral catheterisation from the bladder for the evacuation of hydro- or pyo-nephrosis has occasionally been performed successfully (Pawlik). It is probable that only strictures in the upper portion of the ureter are accessible for operative interference, although Kelly[4] met with temporary success in one case of stricture low down by passing elastic bougies from the bladder. Such strictures have been treated in three ways: (*a*) Dilatation by bougies from the pelvis of the kidney as reported by Alsberg.[5] (*b*) By longitudinal

[1] *Samm. klin. Vortr.*, No. 355, 1890.
[2] *J. Am. M. Ass.*, vol. xxii., 1894, p. 335. [3] *Ann. Surg.*, vol. xviii., 1893, p. 658.
[4] *Johns Hopkins Hosp. Rep.*, vol ii., 1891, p. 235.
[5] *Verhandl. d. deutsch. Gesellsch. f. Chir.*, xxi. Congres, 1892, p. 43.

division of the stricture and transverse union of the wound as practised by Fenger.[1] This operation is on the plan of the Heinicke-Mikulicz operation for stenosis of the pylorus, and is useful for strictures which are not too extensive. The upper and lower ends of the ureter are brought together by folding the ureter upon itself, and the remainder of the wound is united by sutures through the outer and middle coats. (*c*) Resection of the ureter, and implantation of the distal end into the pelvis of the kidney as practised by Kuster,[2] who, after transverse division of the ureter below the stricture and at the entrance to the pelvis of the kidney, unites the ureter to the pelvis by dividing the upper end of the ureter in a longitudinal direction, unfolding the divided end, and suturing it to the opening in the sac—the remainder of the wound being closed by catgut sutures. Fenger thinks this operation may be useful in rupture or division or stricture of the upper end of the ureter; but in a similar case of stricture in the upper end of the ureter, especially if the ureter were not elongated or the kidney movable, he would prefer the plastic operation he has proposed *(vide supra)*, as it is easier of technique and has proved successful in a case of traumatic stricture below the pelvic orifice. Longitudinal wounds of the ureter have already been considered in the discussion of the operation for stone. Transverse wounds are much more difficult to deal with satisfactorily, as there is a tendency to retraction of the wound, causing the sutures to tear out, and there is always a liability to stenosis; in experiments upon animals and in operations on the human subjects attempts to unite complete tranverse wounds of the ureter have failed. Complete transverse wounds of the upper end of the ureter should be treated by implantation of the ureter into the pelvis of the kidney (Kuster's operation, *vide supra*); those near the bladder should be treated by implantation into that viscus; and those in the continuity of the ureter should be treated by uretero-ureterostomy, after Van Hook's[3] method of lateral implantation if possible. Van Hook's method of anastomosis is as follows: (*a*) Ligate the lower portion of the tube one-eighth or one-fourth of an inch from the free end, with silk or catgut. Make with fine, sharp-pointed scissors a longitudinal incision, twice as long as the diameter of the ureter, in the wall of the lower end, one-fourth of an inch below the ligature. (*b*) Make an incision, with the scissors, in the upper portion of the ureter, beginning at the open end of the duct, and carrying it up one-fourth of an inch. This incision insures the patency of the tube. (*c*) Pass two small cambric sewing needles, armed with one thread of sterilised catgut, through the wall of the upper end of the ureter, one-eighth of an inch from the extremity, from within outwards, the needles being from one-sixteenth to one-eighth of an inch apart, and

[1] *J. Am. M. Ass.*, vol. xxii., 1894, p. 335.
[2] *Arch. f. klin. Chir.*, band xliv., heft 4, 1892.
[3] *J. Am. M. Ass.*, vol. xxi., 1893, pp. 911, 965.

equidistant from the end of the duct. It will be seen that the loop of catgut between the needles firmly grasps the upper end of the ureter. (*d*) These needles are now carried through the slit in the side of the lower end of the ureter into and down the tube for half-an-inch, where they are pushed through the walls of the duct, side by side. (*e*) It will now be seen that the traction upon this catgut loop passing through the wall of the ureter will draw the upper end of the duct into the lower portion. This being done, the ends of the loop are tied together securely, and, as the catgut will be absorbed in a few days, calculi do not form to obstruct the passage of the urine. (*f*) The ureter is now enveloped carefully with peritoneum, as already described in other operations, provided an intra-peritoneal operation has been done.

In addition to this procedure, Bloodgood[1] and others have applied two sutures through the external coats only, as an additional security against leakage. This operation has been successfully performed on the human subject by Kelly,[2] who accidentally divided the ureter whilst removing a fibroid of the uterus.

Division of ureter, with loss of substance so considerable as to make reunion of the two ends impossible, requires different operative procedures:—(*a*) Implantation of the ureter into the bladder. This operation is preferable to all other procedures when the upper end of the divided ureter is long enough to reach the bladder; and may be performed either by extra- or intra-peritoneal methods. Paoli and Busachi[3] suggest that this operation should be done by splitting the distal end of the ureter, and uniting it by sutures to an incision in the bladder; but Penrose[4] and others have acted upon Van Hook's suggestion of uretero-ureterostomy, and in a similar manner invaginated the cut end of the ureter into the bladder. (*b*) Implantation of the ureter into the bowel. This operation is strongly condemned by Van Hook on account of the liability to infection of the ureter and kidney. The bowel therefore should never be chosen when it is possible to implant the ureter into the bladder. If this be impossible, on account of defect in the ureter, it is still an open question whether or not implantation into the colon should be tried before resorting to implantation in the lumbar region, or abdominal wall, or to nephrectomy. (*c*) Implantation of the ureter on the skin. Losses of substance of the ureter, too extensive to permit of uretero-ureterostomy, or located too high up to permit of implantation of the upper end into the bladder, will require either implantation on the skin or into the bowel; but the latter is objectionable for the reason already given. Implantation on the skin may have to be followed by secondary nephrectomy,

[1] *Ann. Surg.*, vol. xix., 1894, p. 77.
[2] *Ibid*, p. 70. [3] *Ann. d. mal. d. org. génito-urin.*, 1888.
[4] *Med. News*, vol. lxiv., 1894, p. 470.

which, however, appears to be much less dangerous than the primary operation.

The prevention of incontinence of urine caused by uretero-uterine and uretero-vaginal fistulæ is accomplished in three ways:—(*a*) Plastic operations, with a view to displace the fistula from the vagina or cervix into the bladder. In most of the cases, however, it will be better to perform an implantation of the ureter into the bladder. (*b*) Kolpokleisis, which consists in closure of the vagina on the distal side of a vesico-vaginal fistula. The disadvantages of this operation are that the fistula may contract, and that marital relations are made impossible except in cases where a partial kolpokleisis can be made. (*c*) Nephrectomy, the operation of last resort. It has been necessitated in some instances by infection of the kidney; and although in fourteen cases only one patient died, it is applicable only to cases where the other kidney is healthy.

Dr. Fenger gives an account of forty cases of uretero-vaginal fistula, of which two were secondary to operation on vesico-vaginal fistula, three followed pelvic abscesses, five occurred after vaginal hysterectomy, twenty-eight followed childbirth, and in two the cause was unknown. Of these forty, twenty-four were operated upon as follows: Plastic invagination into the bladder through the vagina was successful in ten cases; kolpokleisis and nephrectomy were each performed in five cases; and in the remaining four, attempts at operation were abandoned as unsuccessful.

JAMES SWAIN.

LARYNGOLOGY.

During the past few months the Medical Journals all over the world have published striking cases illustrating the action of antitoxin in the treatment of diphtheria. When we remember, however, that the teaching of all recent experience goes to show that the absolute and infallible diagnosis of true diphtheria depends on a bacteriological investigation which only experts in such work are fitted to make, it behoves us to be very cautious in accepting the statements about the action of any remedy in this disease. Antitoxin has, however, been tested on a large scale and with the bacteriological check in every case, by Ehrlich, Kossel, and Wassermann,[1] who treated 220 cases and cured 76.4 per cent. Of 30 of the cases in which tracheotomy was necessary, 55.1 per cent. were cured. All the children who were inoculated on the first day of the disease were rescued, and the mortality steadily increased with every day that the disease continued untreated by the specific until on the fifth day it was 56 per cent.

Roux[2] has treated 300 cases of true diphtheria between February 1st and July 24th, 1894, with 78 deaths, *i.e.* 26 per cent., whereas the average mortality in the same hospital under

[1] *Deutsche. med. Wchnschr.*, 1894, No. 16. Abs. in *J. Laryngol.*, vol. viii., 1894, p. 592.
[2] *Lancet*, 1894, vol. ii., p. 675.

the most approved older methods had previously been 50 per cent. A large number of children who were admitted into the diphtheria ward as suffering from that disease, but in whom the specific bacillus was not found, were inoculated pending the bacteriological investigation, and none of them took the infection although freely exposed to it. The dose used was 20 cubic centimetres on admission, and in most cases 10 to 20 cubic centimetres twenty-four hours afterwards, and this usually completed the cure. The pulse and temperature were taken as the guides for the repetition of the injection, and so long as the temperature did not fall below 100.4° it was repeated. The maximum quantity used in any case was 125 cubic centimetres. The false membrane ceases to grow within twenty-four hours of the first injection, and detaches itself usually within thirty-six to forty-eight hours, at latest on the third day, and it ceases to produce any bacillus culture from the third to the fifth day. In the light cases the fall of temperature occurs very soon after inoculation; in the severe ones it only begins after the second or third dose, and resolution by lysis is the rule. The pulse remains quick for days. If the streptococcus is associated with the specific bacillus the cases are more serious and several injections may be necessary.

The cases of pure diphtheritic croup numbered 49, with 15 deaths; *i.e.*, 30.9 per cent. Deducting four cases that came in so ill that they died in less than twenty-four hours, we have 45 cases with 11 deaths; *i.e.*, 24.4 per cent. The cases of associated croup numbered 72, and deducting ten cases that were in the ward less than twenty-four hours, 62 cases with 31 deaths; *i.e.*, 50 per cent. All these 121 children were tracheotomised, and 56 died, *i.e.* 46 per cent., as against 68 per cent. under older methods of treatment. We know that the cases in which tracheotomy is necessary are much more serious than those in which it is not necessary, and it is very interesting to note that whereas at least 50 per cent. of all cases of diphtheria were tracheotomised when treated by the older methods, only 40 per cent. were tracheotomised of those treated with antitoxin.

Later statistics published in our own and foreign medical journals go to show that the mortality rate is distinctly less than that shown by Roux's cases.

There is, unfortunately, great difficulty in obtaining a supply of antitoxin; the British Institute of Preventive Medicine is quite unable to keep pace with the demand. Sir Joseph Lister's appeal for £2,000 to enable the Institute to place an adequate supply at the service of all medical men who require it, met with a tardy response, very different from the generous contributions of French municipalities in aid of Roux's treatment of his numerous cases, and of the Pasteur Institute. Another important point is that Behring[1] denies that Aronson's serum

[1] See *Deutsche. med. Wchnschr.*, 1894, Nos. 21, 15, quoted in *J. Laryngol.*, July and September, 1894.

obtained through Schering is as powerful as his own, although the latter serum has been used at St. Bartholomew's Hospital, and by some medical men in their private practice. It is, therefore, of prime importance that the supply should be made adequate to the demand, and that it should be of one standard quality and strength, which can only be accomplished by ample funds being placed at the disposal of the Institute of Preventive Medicine, or some such bureau of distribution, and if necessary the Local Government Board ought to step in and help.

A most exhaustive report on diphtheria and pseudo-diphtheria has been published on behalf of the New York City Health Department by Drs. Park and Beebe.[1] In it they state that 5,611 cases of suspected diphtheria were bacteriologically examined during the year ending May 4th, 1894, and of these the Loeffler bacillus was found in 3,255; *i.e.*, 58 per cent. It was not found in 1,540 cases, *i.e.* 27 per cent.; and it was doubtful in 816 cases, *i.e.* 15 per cent., because the exudate was either obtained too late in the disease, *e.g.* after the fourth day, or was allowed to dry, or was imperfectly taken from the throat, or the culture media were allowed to become contaminated. Of all the cases of acute laryngitis in children that have been examined in the bacteriological laboratory during the past ten months, about 80 per cent. were undoubtedly diphtheritic, and of the remaining 20 per cent. only 14 per cent. were certainly not diphtheritic. They show, conclusively, that false membrane may be quite absent from the pharynx and tonsils, and yet the case be truly diphtheritic.

It has been found that streptococci are regularly present in the throats of persons living in large cities, and that other forms of cocci, especially the pneumococci and staphylococci, are apt to be associated with them. So long as the mucous membrane is healthy, they create no disturbance; but damage to it by cold, specific fevers, &c., at once enables them to attack the mucous surface and cause an inflammation. This results commonly in an exudate appearing, on the tonsils by preference; but it may extend into the pharynx, larynx, and nostrils. The mortality is greatly less than it is in true diphtheria, and it is seldom, if ever, communicable.

I have just had under treatment a case of this kind, with "patches" on both faucial tonsils, pharynx and lingual tonsil, persisting for weeks; but the patient has not felt ill, has had no rise of temperature, and is evidently not infectious to other people.

Drs. Park and Beebe find that there are at least two kinds of bacteria to which the name "pseudo-diphtheria bacillus" has been given: 1. Bacilli which differ in no way from genuine diphtheria bacilli, except that they lack virulence. As Roux, Yersin, and Fränkel have pointed out, this loss of virulence occurs naturally at times, and can also be produced artificially.

[1] *J. Laryngol.*, vol. viii., 1894., p. 699.

2. There are the bacilli described by Escherich, which are uniform in their peculiarities in staining, size, shape, and the production of an alkali instead of an acid, to which alone the name "pseudo-diphtheria bacilli" should be given.

The Loeffler bacillus can live for long periods outside the body: *e.g.*, on blood serum, 155 days (Hofmann); on blood serum, seven months (Loeffler); in gelatine, eighteen months (Klein); in dried membrane, twenty weeks (Roux and Yersin); on a child's toy kept in a dark place, for five months. A number of cases were met with where infected bedding or clothing had spread the disease.

Since the bacteriological investigation of all cases in which diphtheria is suspected is so extremely important; in fact, since it alone enables the sanitary authority in a city to know the extent of the disease, if any be present, to which the city is subject, and since it alone enables private practitioners and the staffs of hospitals to know what case is truly diphtheritic, it is urgently necessary that the Government or municipal authorities should appoint officers and equip laboratories for the special purpose of investigating suspected cases. In fact, every medical man should be supplied with the necessary apparatus for collecting material, to be sent to the laboratory for cultivation and examination; a report to follow this as rapidly as possible.[1] This is being done in America on a large scale. I believe that a resolution of the British Laryngological Association has been submitted to the Local Government Board on the subject, and it is worth the attention of all medical associations in our country.

BARCLAY J. BARON.

[1] Mr. F. Wallis Stoddart, public analyst for Bristol, is prepared upon application to supply sterilised tubes (with swab) to any medical man who has a doubtful case. When these are returned to him he will submit them to bacteriological investigation, and furnish a report.

Beginning in January, Dr. D. S. Davies, the medical officer of Health for Bristol, will supply "culture outfits" and, in the Sanitary Authority's laboratory, examine cultures from suspected cases of diphtheria.—ED.

Reviews of Books.

Clinical Medicine. By JUDSON S. BURY, M.D. Pp. xx., 468. London: CHARLES GRIFFIN & COMPANY, LIMITED. 1894.

We cannot attempt in a short review to give even an outline of the large amount of information that is contained in this work. There is now an almost embarrassing number of books on clinical diagnosis to choose from; but we think that this is one of the best, and we have no hesitation in cordially recommending it. It is well and clearly written; its style is inter-

esting, and it is calculated to encourage the clinical student to undertake more exact and thorough investigation of his cases. The illustrations are abundant, excellent, and judiciously selected: those illustrating the deformities of the hands and feet in peripheral neuritis taken from the late Dr. Ross's book are particularly good; there are plenty of well-executed diagrams, and a number of sphygmograms. We think a short account of two or three of the best cardiographs in use might have been given.

The book essentially consists of a detailed account of the methods of examination of all the organs of the body, of the excretions, and of the variations from the normal in both organs and excretions that are met with in disease. The descriptions of the methods of physical diagnosis, of chemical and bacteriological examination of the fluids and excretions of the body, are everywhere clear, and the directions are so clear that they can be easily followed out. It is a most useful book both for the student in learning his work, and for the practitioner as a work of reference for help in all the multitudinous little points for investigation that occur in daily clinical practice. We will not single out any special section for praise, as all are good; but that on the nervous system, which is apt to be the weak point in books on clinical diagnosis, is particularly well done in this one.

The work is a perfect mine of information on clinical matters; it is very well arranged for ready-reference, and has that essential requirement for books of the kind, a full index. We congratulate the author that his labours, which must have been considerable, have had such a highly satisfactory result, and hope that his book will meet with the wide sale that it deserves to have. The printers and publishers have done their part of the work admirably.

An American Text-book of the Diseases of Children. By AMERICAN TEACHERS. Edited by LOUIS STARR, M.D., assisted by THOMPSON S. WESTCOTT, M.D. Pp. xiv., 1190. Philadelphia: W. B. SAUNDERS. London: F. J. REBMAN. 1894.

In welcoming this book as a standard addition to the rapidly increasing literature of diseases in children, we admit that the editor has succeeded in making considerable progress in the journey toward the ideal volume he so cleverly describes in his preface, although we can hardly congratulate him on the production of what he calls one "readily-handled volume," for the book is large even to the extent of being cumbersome. Perhaps, however, the issue of this over-large size instead of the publication of the work in two volumes has been wise as the less of two evils.

The work itself is recent in the best sense of the term, not merely as regards the time of its appearance, but is very satisfactory in that it is an exposition of present scientific knowledge and practice. It is the product of the experience of a large number of American physicians and surgeons, each one of whom has had ample clinical experience and understands the subject upon which he writes. The book is a model as regards paper, printing, and pictures; many of the illustrations are as good as can be desired: as examples, we would instance Plate V. (Hutchinson Teeth), Plate VIII. (Scarlet Fever), and Plate XVIII. (Sporadic Cretinism). There are also several excellent coloured illustrations of skin diseases.

It would seem almost invidious in a work so fairly good all round to make distinctions by selecting any articles as of greater merit than others, but still we feel constrained to mention our especial appreciation of "Diseases of the New Born," by Dr. E. P. Davis; "Tuberculosis," by Dr. William Osler; "Hysteria," by Dr. James Hendrie Lloyd, and an extremely useful contribution from the pen of Dr. B. Alexander Randall on "Diseases of the Ear."

The value of the book is considerably enhanced by a very complete index, the labour of preparing which we think can only be appreciated by those who have been engaged in similar work.

Taken as a whole we can strongly recommend this volume as a trustworthy authority upon the subjects of which it treats.

Trephining in its Ancient and Modern Aspect. By JOHN FLETCHER HORNE, M.D. Pp. xi., 133. London: JOHN BALE & SONS. 1894.

We have in this book a very interesting historical account of the operation of trephining extending from the neolithic period down to the present day. The author acknowledges his indebtedness to M. Broca for much of the early literature of the subject, and he has also drawn freely upon other writers, both European and American, so that only a small part of the book can be called original. He has unfortunately forgotten sometimes to acknowledge the origin of his information, for Dr. J. B. Hamilton points out [1] that long extracts have been freely taken from an address delivered by him at Detroit in 1892 and published in the same year. [2]

The latter part of the book is devoted to the modern surgery of the skull; but we cannot congratulate the author on his treatment of this portion of the subject. Four successful cases are reported as having come under his notice, either under his immediate care or that of his colleagues; but although the

[1] *J. Am. M. Ass.*, vol. xxii., 1894, p. 234. [2] *Ibid*, vol. xviii., 1892, p. 733.

result is described as being in each case most satisfactory, yet we observe that two cases out of the four were followed by free suppuration, and in one a hernia cerebri had to be dealt with before the wound healed. The important subject of trephining for intra-cranial suppuration the result of ear disease is dealt with in a single paragraph of eighteen lines, and no mention whatever is made of sinus thrombosis.

It is a pity that the author did not obtain the assistance of a friend to read the proofs for him. The errors of spelling, especially in proper names, are much too numerous for the book to be a credit: instances are to be found in the introduction, and on pages 7, 8, 18, 43, 47, 79, 104, &c. The book also deserves censure for the inexcusable absence of an index.

Congenital Affections of the Heart. By GEORGE CARPENTER, M.D. Pp. 103. London: JOHN BALE & SONS. 1894.

This little book gives a very good account of an obscure subject. It is clearly written, and the author shows a thorough acquaintance with his subject, due to a considerable experience in these affections. He does not attempt in this short monograph to compete with the larger treatises on the subject; but we think that he has been successful in writing a very useful and practical little book, just adapted to the wants of the student and practitioner. A short account is given of the developmental anatomy of the heart and great vessels; then the different forms of malformation are described, there is a section on symptoms, prognosis and treatment, and the clinical histories of some well-selected cases are added. The author very rightly points out that the murmurs present in these cases cannot be relied upon for an exact diagnosis of the condition present, and cautions his readers against concluding, as is so commonly done, that all cardiac bruits occurring under four years of age are of congenital origin. He gives some valid reasons for thinking that a certain percentage may be due to rheumatism. We think the book a good one; but why has it neither table of contents nor index?

The Physician's Wife and the Things that Pertain to her Life. By ELLEN M. FIREBAUGH. Pp. xi., 186. Philadelphia: THE F. A. DAVIS COMPANY. London: F. J. REBMAN. 1894.

Of the making of books there is no end, but this one does not require much study and will not induce weariness. The doctor's wife admits the reader to her husband's smoking-room and entertains him with suitable discourse, such as many a

country doctor's wife could give, though few could give it so well. The wily angler who remarks, "Huh! If you don't never do nothin' worse than fish on Sunday you'll git to heaven, shore," and "Besides, you little goose, it ain't wicked to fish with a bent pin, because you'll not ketch nuthin'," and the clover-huller who announces with a contemptuous snort, "I've seed doctors before I ever seed *you;* and I've done a heap o' docterin' myself, I'll let ye know that! I've buried three husbands and six children, an' I doctered 'em all myself," are followed by the excellent hint, "Doctor, when the weather is fine and the roads are good, do not wait for your wife to ask you now and then if you are going to the country to-day, and if it would be agreeable to you for her to accompany you. While you may answer 'Yes' with alacrity, it will still not be quite so pleasant to her as if the suggestion had come from you."

The following paragraph will come home to some of us: "When the doctor is sick he is capable, as we have seen, of growing despotic. Perhaps one reason for this may be that it is only a step from autocrat to despot; and when he is well he makes an excellent autocrat, as many physicians' wives have occasion to know. He is so accustomed to having his way and his say in the sick-room, which is right, that he wants to be the autocrat of the breakfast-table, the dinner-table, the tea-table, and the time between tables, which is not right."

We must refrain from further quotation. The above will suffice to show that the reader will be well entertained with humour, pathos, and good sense, infused with an agreeable flavour which we can only describe as American.

Spinal Caries. By NOBLE SMITH. Pp. vi., 146. London: SMITH, ELDER & Co. 1894.

This is a practical treatise, giving the results of the author's very considerable experience on the subject of spinal curvature. It is illustrated with numerous drawings made by the author himself, most of which are of value in explaining the text, although they may not be altogether artistic.

Mr. Noble Smith is very emphatic in condemning Sayre's plaster-of-Paris jackets. He records numerous instances where pressure sores have been caused by improper application or imperfect attention afterwards; but he completely ignores the hundreds and thousands of cases which have been cured among hospital patients by the proper use of this invaluable mode of treatment.

The only kind of apparatus which meets with the approval of the author is what he calls the "adaptable metal splint," consisting of an abdominal belt, with two padded plates for the sides of the angle of disease and shoulder straps, the whole being held together by two upright steel bars. We do not

doubt the efficacy of this apparatus when carefully fitted and applied, but we altogether deny that it ought to replace entirely the use of poro-plastic felt or plaster-of-Paris jackets.

In the treatment of spinal abscesses, the author has apparently met with such extraordinary success that there can be nothing left to be desired. For fourteen years he has treated all chronic abscesses by opening freely, and afterwards syringing them out daily with carbolic acid 1 in 40. With such treatment he has never known any abscess to become contaminated, and has never produced anything but beneficial results (p. 113). Would that we could all obtain similar results!

The Physiology of the Carbohydrates: their Application as Food and Relation to Diabetes. By F. W. PAVY, M.D., F.R.S. Pp. x., 280. London: J. & A. CHURCHILL. 1894.

"A life's labour, attended with unceasing laboratory work, has been devoted to the attainment of the knowledge that has been acquired." This volume contains the record of what has been done, and the result is that the writer endeavours to overthrow the glycogenic doctrine which has conducted the minds of physiolgists in the wrong direction, and hence their search for knowledge has only resulted in fruitless gropings in the dark. "Through the recognition of the glucoside constitution of proteid matter, a clue was given which has led to the discovery of what I venture to regard as the true key to the situation." . . . "The liver, in fact, instead of doing what is claimed for it under the glycogenic doctrine, does exactly the reverse. It neither forms sugar to be discharged into the general circulation and conveyed to the tissues, nor temporarily stores up carbo-hydrate matter from ingestion, to be subsequently allowed as such to pass on. On the contrary, it keeps the general circulation free from the sugar that would otherwise enter and show itself in the urine. Its office is an arresting one in relation to carbo-hydrate matter; and if it were not for the exercise of this office, we should all be in the same position as the diabetic."

What, then, becomes of the carbo-hydrate matter? This question Dr. Pavy claims to have materially advanced in this research. He points out that the glycogenic doctrine throws no light upon this matter, inasmuch as it fails to show in what manner the sugar is disposed of in the tissues. Dr. Pavy deals with the disposal of carbo-hydrate matter by protoplasmic action under the respective heads: 1, Transmutation; 2, Application to the production of proteid; and 3, Transformation into fat. By these means, or one or other of them, carbo-hydrates of the food are disposed of in a certain manner, and if not so disposed of we have the condition known as diabetes.

Many of the points raised are such as will receive much

criticism from physiologists and chemists; but the author speaks with authority on these matters, and his conclusions are worthy of the most careful consideration. He opens up a new field for the use of carbo-hydrate food when he concludes that the major part of the absorbed sugar is immediately combined with peptone to form a proteid, and he upsets some of the most cherished convictions of the older physiologists. There is much in the book which is new, and withal it is the outcome of steady, patient investigation; it is the work of a master in his subject, and he throws down the gauntlet with vigour and decision.

We shall await the details of the combat with much interest.

Text Book of Abdominal Surgery. By SKENE KEITH, assisted by GEORGE E. KEITH, M.B., C.M. Pp. xiv., 508. Edinburgh: YOUNG J. PENTLAND. 1894.

There are many things that one must deal gently with in the first edition of a book, and amongst these are the inclusion of retro-peritoneal tumours, omental tumours, and mesenteric cysts under "The Peritoneum"; and the somewhat more humorous classification of Cæsarean section, Porro's operation, symphysiotomy, &c., as "Diseases of the Uterus" (*vide* Table of Contents). So too amongst the pardonable errors we may mention the usual mistakes of tympanitis for tympanites (p. 157), and ileum for ilium (pp. 191, 262). Koeberlee frequently appears for Koeberle, and laparo-electrotomy occurs not less than eleven times for laparo-elytrotomy—indeed the latter word is never once put correctly. There is a tendency now and then to repeat what has been said before, and this is most marked on pp. 178 to 180 where we find much that is contained on pp. 167 *et seq.*

We cannot deal so lightly with the questionable taste displayed in many parts of the book, and especially when the authors are inclined to disparage the work of others.

In the preface we are told that the book is "intended to show the present state of our knowledge of abdominal surgery"; but we fear it scarcely does that. Ureteral surgery, which has made great advances of late, scarcely finds a place except as regards the question of stone (mentioned under nephro-lithotomy, p. 276) and accidental division in the removal of an ovarian tumour (p. 365). In the former case (that of stone in the ureter) it is stated (p. 277) that the authors are not aware that stones have been removed from the ureter by a supra-pubic cystotomy; and yet we believe Tuffier has reported two cases. No allusion is made to the cases of Emmet, Berg, Sanger, and others, in which stones have been removed from the ureter through the bladder by dilating the female urethra. Supra-pubic cystotomy too, is not granted a place; and the use of Murphy's buttons,

which have practically revolutionised the operation of cholecystenterostomy, are not even mentioned.

The book is interspersed with the record of clinical cases which certainly help to exemplify the points which the authors wish to bring out; but in many of these cases it is desirable that references should be given, in order that others may benefit by the perusal of the details of the original report. There are no references throughout the book; and indeed the authors have, as we think, paid too little regard to the acknowledgment of the work of others, for a similarity in phraseology with some books with which we happen to be familiar has struck us, and we readily subscribe to the statement in the preface that the authors are "undoubtedly indebted to others."

The work, as far as it goes, is clearly written; but it is not up to date, and contains little that is original. The best chapters are those on "Tumours of the Ovary" and "Fibroid Tumours of the Uterus," to which about one-fourth of the book is devoted.

No doubt much that we have complained of can be altered in a future edition; but we feel that in its present form it cannot be placed amongst those in the front rank of abdominal surgery.

The publisher has done his part of the work admirably; but although pictorial processes have been lately unduly introduced into some works, especially those of this class, additional plates and diagrams would have been useful in this volume.

A Descriptive Catalogue of the Clinical Museum and Journal of Proceedings. Part I. By JONATHAN HUTCHINSON, F.R.S., LL.D. Pp. 128. London: J. & A. CHURCHILL. [N.D.]

Jonathan Hutchinson has done as much as any living man for the clinical study of disease; in the establishment of a Clinical Museum, of which the above is a part catalogue, he has secured that his work will have a wider reach and a greater value even than his writings and his lectures.

The purpose of the museum cannot be better described than in Mr. Hutchinson's own words:—

"The Institution which I have ventured to name a Clinical Museum is to some extent an experiment. It is an attempt to show that pictorial representations of disease may be of great use in advancing our knowledge of it, and next to ascertain what are the best methods of displaying them. It is not a new idea. The value of drawings, &c., has been recognised from the earliest times of clinical study, and museum makers from Aldrovandus to Hunter, and from Hunter onwards, have availed themselves of the artist's pencil in order to perpetuate what could not be otherwise preserved. Many atlases of pathology

and of clinical surgery, more especially in reference to skin diseases and syphilis, have from time to time been published. A certain number of models and casts, with even a sprinkling of drawings, have also found their way into our general museums of pathology. With, however, the single exception of the splendid collection at the Hôpital St. Louis in Paris, I am not aware that any attempt has yet been made to illustrate systematically the appearances which disease presents in the living subject. I had at one time hoped that this work would have been carried out on a suitable scale in our own College of Surgeons. In connection with the Erasmus Wilson bequest, and the recent enlargements of the Museum buildings, there seemed good reason to believe that this hope was about to be realised. In this belief I even ventured to offer the whole of my own collection for the acceptance of the College, appending, however, to my offer the condition that it should be adequately displayed and not put away in drawers or portfolios. As the Council did not see its way to engage that this condition should be fulfilled, the proposal fell through. The College has, however, devoted one of the galleries to the display of drawings and casts, and of these it possesses a very valuable collection, not a few of the original drawings being unique. Having been forced to realise, however, that it was not probable that during my lifetime anything would be attempted at the College on the plan which I had contemplated, and several other schemes for conjoint enterprise having also come to nothing, I was compelled to fall back on myself and reluctantly to entertain the idea of building a gallery of my own. I had felt that my life was slipping away, and that I could not hope to have many years more in which to work. My collection of drawings, &c., had become large, and from the nature of the materials it would be comparatively useless should it pass into other hands without having been arranged and catalogued by myself. After several disappointments I was fortunate enough to secure the lease of a house behind which there was room for building, and during the summer of 1893 the galleries which now constitute the museum (211 Great Portland Street) were being built. They were opened in November, 1893. Although I was obliged very soon to realise that the space was much too limited, yet there has been reason to be fairly satisfied with the experiment as far as it has gone.

"The design of the Clinical Museum is to collect, from all sources, delineations of diseased appearances in the living subject, and of pathological specimens in their recent state, and to display them in such a way as to be easily accessible to the visitor. It would be absurd to relegate the bones and bottle-specimens which constitute the chief contents of our pathological collections to locked-up cupboards, and it is not less so to keep our drawings stowed away in portfolios. The needs of the present day are to be consulted by making everything as

accessible as possible, and especially is display advisable in the case of pictures, of which one main value is that they strike the eye of the observer, and teach their lesson at a glance."

If the purpose of a museum of disease is to show the progress and effects of disease, then is Mr. Hutchinson's one of the most valuable in existence. Nearly all our museums are continued on the assumption that disease is best seen in spirit through the medium of glass. Now "pickle specimens" preserve the form imperfectly, and the colour not at all. They have their value; bleached and distorted as they are, they are still "the thing itself," and they cannot be dispensed with. But they are not the only, and for many diseases they are not the best, means of demonstrating morbid processes. For many, perhaps most, diseases the pickle-jar is not available at all; it is available only for fatal diseases where the specimen is recovered *post mortem*, or for surgical diseases where the peccant portion is removed by operation. For other diseases, the gross termination as shewn in the jar is very different from the varied appearances it exhibited under treatment. Still the pickle-jar remains the mausoleum of pathology; and the orthodox worshipper of the science must make it his resort. The fane, however, is not much frequented. Time after time may one traverse the most magnificent pathological museum in these islands—the Hunterian,—and find oneself the only visitor. The truth of the matter is that we have too much of the pickle-jar. If its appreciation is neglect, it is no more than it deserves.

The simple words in which Mr. Hutchinson refers to the rejection of the offer of his museum to the College of Surgeons are almost pathetic. That it would have added to the value of the Hunterian Museum, the appreciation it has already received is sufficient testimony. That Hunter himself would eagerly have accepted such a gift there can be no doubt. Its permanence ought to be secured on a basis broader than the life of one man, however generous and public-spirited. And the lines on which it has been built up ought to be followed and amplified by those whose business it is to diffuse a knowledge of the external features of disease.

We have been able to make but one visit to the museum, and that only of three hours' duration. In this time it was scarcely possible to get more than a general idea of the grouping and arrangement of the contents. As a sort of test, a small group of diseases in which we were interested was selected, and a cabinet was overhauled. There were some half-dozen drawers in the cabinet, and two hours were spent in superficially examining the contents of two of them. We unhesitatingly affirm that in those two hours we had presented to us a richness and variety of illustration of the diseases in question which no other similar museum collection in Great Britain could match or even approach. It seemed to us as if the clinical student, the pathologist, or the author desirous of

bringing to bear on his subject the accumulated knowledge of the past and of vivifying his own conceptions of the disease, were bound to have recourse to the Hutchinson Museum. We can give it no higher praise than this.

In the meantime we may lay the lesson this museum teaches to heart, and consider the duty we, who see disease and pass it through our hands, owe to our successors and our pupils. If one man in the spare moments of a busy lifetime has been able to do so much, what might the properly directed efforts of a whole college numbering its members by the thousand, and reckoning its revenues by tens of thousands not achieve? We might at least hope that the aspirations of our pathologists may soon, with such an example as the Hutchinson Museum before them, lead them beyond their present apotheosis of the pickle-jar.

The Hutchinson Museum may be seen at any time on special application. On Tuesdays from two to six it is always open. Patients are then present, and demonstrations are given often by the medical attendants under whose care they have been.

Annual of the Universal Medical Sciences. Edited by CHARLES E. SAJOUS, M.D. Five volumes. 1894. Philadelphia: The F. A. DAVIS COMPANY. London: F. J. REBMAN.—Dr. Sajous and his seventy associates, assisted by over two hundred corresponding editors, collaborators, and correspondents, have again brought to a successful issue this work, which is above all criticism. The editorial staff deserve the thanks of the medical world for their continued efforts. We are a little alarmed at seeing some advertisements in one of the volumes, and we hope that they will be kept out of future issues.

Travaux d'Electrothérapie Gynécologique. Volume I. Fascicules I. et II. Pp. 720. Paris: SOCIÉTÉ D'EDITIONS SCIENTIFIQUES. 1894.—We are exceedingly glad to have this publication on our Exchange list. It is to appear in half-yearly volumes under the editorship of Dr. Apostoli. The use of electricity in gynæcology has not found a large amount of favour in England, and the statements of its results have been so conflicting that we welcome this work, as we believe it will be of the greatest service in permitting an impartial judgment of such methods. The treatment which was introduced by Tripier and improved by Apostoli has been met in some quarters by the most hostile criticism, and the editor in his preface draws attention to the desirability of putting an end to this professional ostracism. He proposes to deal with other than French literature, and he prints, translated into French, contributions of English, American, Russian, German, &c., surgeons, either as original articles or as reprints from the transactions of various societies and medical journals which have appeared in recent years. The work contains a large mass of information on the treatment of all classes of gynæcological disease which have been treated by electricity. The Russian paper is particularly complete. Some of the articles are followed

by a summary of the treatment and its results, and we think it would be well if this plan was adopted in all, for the number of cases quoted in detail, although reflecting the greatest credit on the editor and his collaborators, makes the work somewhat difficult to grasp as a whole. The completeness with which this new work has been carried out is a matter for congratulation.

De l'Extraction des Osselets dans l'Otorrhée. Dr. E. J. MOURE. Pp. 12. Paris—Bordeaux: O. DOIN ET FERET ET FILS. 1894. —This pamphlet consists of a paper read before the Society of Medicine and Surgery of Bordeaux on November 25th, 1893, and contains reports of two successful cases operated on, together with some judicious general remarks upon the operation and the cases most suitable for its adoption. The author's conclusions are distinctly favourable, and he looks upon the operation as a useful and valuable one in certain cases.

On Seborrhœa. By JOSEPH FRANK PAYNE, M.D. Pp. 23. London: JOHN BALE & SONS. 1894.—We have read with great interest Dr. Payne's lecture for the London Post-Graduate Course on "Seborrhœa and its Consequences." The subject is a very important one, for seborrhœa forms the initiative outbreak of a very troublesome form of eczema; hence the sooner the condition is recognised by the medical practitioner the better for the patient, as it is a complaint which mostly comes under his care long before a skin specialist has to deal with it. We mean by this statement that if the complaint is understood —and it is to acquaint him with its earliest symptoms that Dr. Payne has given his lecture—very much good may then be done. We can strongly corroborate the association between seborrhœa and boils, which Dr. Payne so clearly points out; and we are very thoroughly convinced that the most scientific treatment of boils we know of has "antisepsis" very emphatically as its basis. The relationship between seborrhœa capitis and seborrhœa corporis is very intimate, and therefore the comparatively new term for the latter process is unquestionably the correct one; but, whether from early association, or because it more graphically word-paints the condition, we must admit we have an admiration for the older term—Lichen circinatus vel circumscriptus. Treat them both by remedies which have "antisepsis" for their object, and it is astonishing how speedily the complaints are relieved and dispersed. We recommend every practitioner to read Dr. Payne's lecture. He will not be troubled with unnecessary details, and he will gain some invaluable hints about treatment.

On the Use of Opium in India. Prepared by ERNEST HART, D.C.L. Pp. vi., 31. London: SMITH, ELDER & Co. 1894.—This reprint from the *British Medical Journal* contains a summary of one hundred reports to the Parliamentary Bills Committee from medical officers and civilians in all parts of India. The

testimony of the overwhelming majority of these shows: (1) That from whatever side the opium question in India is viewed, any interference with the present state of things is quite uncalled for; and (2) That not only would no benefit arise from meddling with the old custom of natives, but, on the contrary, any attempt in that direction is certain to be followed by the most serious consequences to the economic, sanitary, physical, and moral condition of our Indian fellow-subjects, and could not fail to prove highly dangerous or, indeed, fatal to our rule in India.

The Treatment of Chronic Diseases of the Heart by Baths and Exercises. By WILLIAM BEZLY THORNE, M.D. Pp. 24. London: J. & A. CHURCHILL. 1894.—The system which has been elaborated by the brothers August and Theodor Schott is said to give results such as have never been obtained by any pharmaceutical remedies or other hygienic resources. The author has had the opportunity of observing, in one hour, a shrinking of the area of dulness, as measured obliquely a little below the nipple line, of four, and even six, centimetres, and of two and three centimetres in the vertical line.

Aids to the Diagnosis and Treatment of Diseases of Children (Medical). By JOHN MCCAW, M.D. Pp. 181. London: BAILLIERE, TINDALL & COX. [1893].—The author states in his preface that this small book claims to be nothing more than a compilation, and expresses his obligation to as many as seven authors. As a collection of extracts from the chief books on children's diseases, it may be useful to students; but how "the busy general practitioner," for whom it is also written, will be able, without an index, to avail himself of the materials contained therein, we do not comprehend. The statements in the work are clearly put; but the omissions are so numerous, that we should not be inclined to recommend the book except to beginners.

Dwelling Houses: their Sanitary Construction and Arrangements. By W. H. CORFIELD, M.D. Third Edition. Pp. xiv., 125. London: H. K. LEWIS. 1894.—It is satisfactory to note that Professor Corfield's useful and popular treatise has appeared in another edition. So many books of variable merit are now issued upon this subject, that it is well for the householder to possess a manual upon the accuracy and discretion of which he can thoroughly rely.

De la Filariosis. Por el Dr. M. FONT Y TORNÉ. Pp. 20. Barcelona: HENRICH Y CA. 1894.—This address to the Medical Society of Cataluña is remarkable for the minute and exhaustive manner in which the subject is handled. The history of the Filaria sanguinis hominis is given from its discovery by Demarquay in 1864 to the present time; not forgetting the labours of

Cobbold (1872), Lewis of Calcutta (1872), and Manson of Amoy (1876), in the same field. The microscopical characters are also detailed at great length, and the letterpress is illustrated by excellent diagrams of the Filaria at 110 and 450 diameters. The habits of the little worms are described *in extenso;* from which it appears that they are quiescent in the daytime, but are to be found in all parts of the circulation at night. The causes, prognosis and treatment are likewise discussed with due regard to the latest observations, and the whole is supplemented by a graphic account of a case seen and treated by Dr. Font, which is believed to be the only one in Europe. The patient was thirty-five, and he was first attacked when eighteen by an intense pain in the left shoulder for twenty-four hours, from thence it descended to the left groin, and thence to the scrotum, followed by an abscess on its posterior and left aspect, which, after eight weeks, gave way and discharged pus mingled with semi-coagulated blood. He had as many as twenty of these altogether from time to time, and they were always accompanied by rigors and elevation of temperature. The left thumb was punctured at three p.m., and the blood was examined and gave no result; but, when the operation was repeated at midnight, the Filariæ were at once perceived under the microscope, moving freely in large numbers. The man lived on the coast between Barcelona and the Pyrenees, and had never been out of Spain.

Atlas of Clinical Medicine. By Byrom Bramwell, M.D. Vol. II. Part III. Edinburgh: T. & A. Constable. 1893.—The subjects treated in this part of the Atlas are exophthalmic goitre, acromegaly, general exfoliative epidemic dermatitis; and there is also a reprint of the report of a case of unilateral hypertrophy of the face by Prof. D. W. Montgomery, of the University of California. The clinical descriptions are very clear and good. The article on exophthalmic goitre gives a thorough account of all the symptoms of this disease. The author's view is that the primary lesion is in some part of the nervous system; that as a result of this, the thyroid becomes enlarged, and that its increased or perverted secretion leads to widespread secondary disturbances. He lays stress on the value of electrical treatment. In describing acromegaly, a typical case is taken as the text to illustrate the chief symptoms, and the respects in which it deviates from the common type are pointed out. Dr. Bramwell is inclined to consider the headache, vomiting, optic atrophy or neuritis and temporal hemianopsia so generally present as secondary symptoms due to the enlarged pituitary body, and suggests that polyuria, glycosuria and peptonuria when present may have the same origin. He has administered an extract of the pituitary body with improvement of the symptoms in one patient, in another it seemed to do harm. An interesting point for further examination brought out by cases of acromegaly is

the question whether the thyroid and pituitary bodies bear a relation to one another as regards their size. Dr. Bramwell also quotes, as bearing on the diagnosis of acromegaly, Souza-Leite's description of hypertrophic pulmonary osteo-arthropathy, and describes a case of acromegaly in a giantess. The article gives an admirable summary of the whole subject, in which nothing of importance is omitted, and will well repay reading. The directions for examination of such cases will also be found most serviceable. The paper on general exfoliative epidemic dermatitis is an abstract of Dr. Savill's work on the subject, and is accompanied by excellent coloured plates of two of his cases. There are also a series of plates illustrative of acromegaly—photographs of patients, and drawings of the hands and feet; photographs of two men affected with exophthalmic goitre, and a beautiful coloured plate representing the facial changes in old age. This part completes the second volume.

Post-Nasal Growths. By CHARLES A. PARKER. Pp. vi., 98. London: H. K. LEWIS. 1894.—In this little work, which is largely a reprint from an article in the current number of *St. Bartholomew's Hospital Reports*, the term post-nasal growths is applied only to adenoid vegetations or hypertrophic enlargement of the lymphoid tissue in the naso-pharynx. It contains nothing very new, but presents us in a readable form with all that is at present known about this troublesome form of malady with the best methods of treating it. The author has evidently had considerable experience of this affection at the Hospital for Diseases of the Throat and at St. Bartholomew's Hospital, and he rightly calls attention to the frequency of its occurrence and the importance of promptly dealing with it. There is a fashion in disease as in most other things, and at the present moment perhaps the subject of adenoids in the naso-pharynx is somewhat overdone, but we can recommend the book before us as one of the best guides on the subject.

Guy's Hospital Reports. Vol. L. London: J. & A. CHURCHILL. 1894.—The present volume contains no biographical article such as the two which made last year's Reports so interesting, but it includes some good clinical and pathological material, giving evidence of plenty of earnest research and much diligence in making use of the immense resources of Guy's Hospital. About one-fourth of the volume is occupied by a paper on "Diseases of the Duodenum," by Drs. Perry and Shaw, with an appendix containing details of 334 cases of diseases of this portion of the intestine, taken from English sources; the article will form an invaluable source of reference to any future inquirer. Mr. J. H. Targett contributes an able article on "Hydatids in Bone," illustrated by numerous photographs. The substance of this article formed the subject of an interesting demonstration by Mr. Targett at the recent meeting of the British Medical Associa-

tion in Bristol. Other noteworthy articles are, "One Hundred Cases of Hyperpyrexia," by Dr. J. H. Bryant; "Clinical Observations upon Heart Disease," by Dr. James F. Goodhart; and "Five Cases of Digital Chancres Occurring in Medical Men," by Mr. W. H. A. Jacobson. Accompanying the volume is a general index to the first fifty volumes of these Reports, which will prove a valuable assistance to those who possess a complete series.

Handbook of Obstetric Nursing. By FRANCIS W. N. HAULTAIN, M.D., and JAMES HAIG FERGUSON, M.D. Second Edition. Pp. xiii., 243. Edinburgh: YOUNG J. PENTLAND. 1894.—This work is more comprehensive than it need be for the purpose the authors have in view. A good deal of the information is purely for the expectant mother, and many of the conditions dealt with in Chapter X. do not come within the work of the ordinary obstetric nurse, although the information may be of value to her. We are glad to find that the authors do not allow nurses to use vaginal douching, except by order of the doctor. There should have been some reference to concealed *post-partum* hemorrhage, a very dangerous condition easily overlooked, and which may be suspected when there are severe pains in the back, which must not be mistaken for ordinary after-pains. The chapters on the management of the child and on antiseptics are good; but the use of sponges and washable diapers should not be allowed. No mention is made of iodoform. There is nothing better for use after delivery than a twenty-grain vaginal pessary passed once a day for the first week.

The After-treatment of Cases of Abdominal Section. By CHRISTOPHER MARTIN, M.B. Pp. 48. London: SIMPKIN, MARSHALL, HAMILTON, KENT & Co. LIMITED. 1894.—This book is a word-for-word reprint of a series of articles which appeared on this subject in the *Birmingham Medical Review* in 1892–93. The methods of treatment are largely those of Mr. Lawson Tait; but the author differs from that surgeon in his estimation of the value of antiseptics. The teachings are sound and based on considerable experience; and those interested in abdominal work can obtain some valuable hints in these pages. An index would have made the work more useful.

Sprains: their Consequences and Treatment. By C. W. MANSELL MOULLIN, M.D. Second Edition. Pp. 153. London: H. K. LEWIS. 1894.—The second edition of this useful book has been almost entirely re-written, and its arrangement materially altered, so that the first half is now devoted to a general treatment of sprains, including methods of treatment that are applicable to all sprains alike; while the latter half treats of individual injuries, giving the special and particular methods of treatment which should be adopted in each case. The general observations in the first part are very well expressed, and are

evidently based on a careful consideration of the anatomy and pathology of the parts concerned. Due regard is paid to the once neglected subject of over-rested limbs and joints; and great stress is laid upon judicious and careful "bone-setting." The author has a high opinion of massage in the treatment of sprains, and gives full directions for its application in cases of moderate severity in a healthy person a few hours after the accident. In dealing with particular injuries, notice is taken of such diverse affections as Dupuytren's contraction, ganglion of the wrist, flat foot, etc., many of which can hardly be looked upon as sprains. The author regards the affection known as "lawn-tennis leg" as due, not to a rupture of the plantaris tendon, nor to a tearing of any muscular or tendinous structure in the calf, but to a rupture of one of the veins lying between the muscles of the back of the leg, and he advises that the treatment should be exactly that of a ruptured varicose vein. Mention is made of "lawn-tennis elbow" and "riders' strain," but we fail to find any mention of "golf fore-arm" or "cyclists' strain," both of which are commonly met with; we also look in vain for any description of that curious affection known as "Morton's painful foot" or metatarsalgia, which has been so fully described by Professor Morton, of Philadelphia, and other American surgeons, and which is distinctly of the nature of a sprain. Regarded as a whole, the work is a very valuable epitome of our present knowledge of a subject of universal interest and importance.

The Middlesex Hospital, W.: Reports of the Medical and Surgical Registrars and Pathologist for the year 1892. London: H. K. Lewis. 1894.—These excellent Reports, as usual, give a complete account of the work of the Hospital in all its departments; they should be often referred to on account of the statistics of diseases and special reports of interesting or exceptional cases contained in them. Both are of much interest and value. We note two cases of Bèri-Bèri, one of intestinal colic simulating angina pectoris, and, in the treatment of a case of myxœdema, the unpleasant and even alarming symptoms which occasionally follow the administration of thyroid extract. On page 45 *caliac abscess* is obviously a misprint for cœliac axis. In general arrangement and printing the volume deserves high praise.

Wright's Improved Visiting List, 1895. Bristol: John Wright & Co.—Several improvements have been made in this: the paper is better, cash columns have been added, a pocket for loose papers is in each cover, and the book fastens conveniently. The great feature of this list—that the names are written up only once a month—has been found to answer admirably, and it saves much time. The book fits comfortably in the breast-pocket, and is a most useful and constant companion throughout the year. We think it a distinct advance on any of its predecessors.

Notes on Preparations for the Sick.

Fluid Cascara Aromatic. Hypodermic Tablets. Pepsin Aseptic, scale and powder.—PARKE, DAVIS & Co., London.—The **Fluid Cascara Aromatic** is more concentrated than the Cascara Cordial, and is more palatable than either that or the ordinary fluid extract or its tasteless form. This drug, originally introduced by Messrs. Parke, Davis & Co., still maintains its supremacy, and no preparations of it are better known or more trustworthy than are those of this firm. The aromatic fluid cascara is likely to be the favourite, and to be much in demand.

Hypodermic Tablets have established themselves as the most convenient agents for hypodermic use. The difficulty has been that many tablets are difficult to dissolve without hot water and waste of time; but these tablets are very soluble, and may be relied upon for accuracy of dose as well as therapeutic efficiency. They will keep in any climate, and are always ready for use. We have long given up the use of fluids for hypodermic use in favour of some kind of soluble tablet.

The **Aseptic Pepsins,** in scale or powder, are completely soluble, and will digest four thousand times their weight of albumen. They are almost free from odour and taste, and are manifestly superior to the pepsines which have previously been in use. So many kinds of pepsines are now in the market that it becomes necessary to specify which variety is needed. None are better than those of a firm which has an established reputation to maintain.

Cerebos Salt.—THE CEREBOS SALT CO. LTD., Newcastle-on-Tyne.—This is a nutritive table salt, being composed of a mixture of common salt with phosphates. If mankind lived on bread only, and that bread were white, then some such salt as this would be needful to supply the deficient phosphates, but with a mixed diet we cannot assert that this salt is a necessity for perfect nutrition: but it is a fine, dry, excellent salt for table purposes; it does not cake even in the dampest weather, it answers every purpose for which table salt is used, and the phosphates present are likely to be of some little utility. We have used it for several weeks, and have every reason to look upon it as an improvement.

Californian Wines: No. 1, Claret Type; No. 3, Burgundy; No. 12, Burgundy; No. 5, Chablis; No. 6, Sauterne; No. 7, Hock.—GRIERSON, OLDHAM & Co., London.—We have given these wines a trial, and we like them exceedingly. They are made from the same variety of grapes as in Europe; but in California they develop somewhat different characteristics. For instance,

the white wines made from the Riesling, or Hock grapes, although resembling in many respects the German Hocks, have very much less acidity. and, as a rule, more body; this is owing, no doubt, to the fact that these grapes thoroughly ripen in California, whereas in Germany they scarcely ever do so. The wines of Burgundy type are excellent and of moderate price. No. 5 is a clean dry wine, of Chablis type, but with much less acidity than is usual. The white wine, No. 7, made from the Johannisberg Riesling grape, is a high-class hock, of good alcoholic strength, free from acidity, and having considerable flavour and bouquet. Messrs. R. W. Miller & Co., Stokes Croft, are the local agents.

"Johannis."—THE JOHANNIS COMPANY LIMITED, London.—We can speak in the highest terms of this exceedingly pleasant table water, samples of which have been sent to us. It is now so well known and its virtues are so widely recognised that it is not necessary to refer to them in detail.

Diaphtherin. — FARBWERKE VORM. MEISTER LUCIUS & BRUENING, Hoechst o-Main.—We have received from Messrs. Burroughs, Wellcome & Co., who are the sole agents for Great Britain and Ireland, a sample of this preparation, which is a sulphur-yellow powder of slight odour possessed of powerful antiseptic properties rendering it an excellent substitute for iodoform. It is not poisonous and has no caustic action, but is very soluble in water. We have been very pleased with its action in the two or three cases in which we have tried it. It may be freely used in the mouth or nasal cavities.

Europhen. Stoddart's Soluble Sea Salts.—A. & J. WARREN, Bristol.—**Europhen** is an iodised substitution product of iso-butyl-cresol, and may be employed in place of iodoform. Used as a dusting powder as a dry antiseptic, or in solution in olive oil, it has given good results, and being of light weight its drying power is great, whilst it is comparatively odourless and not poisonous.

Stoddart's Sea Salts furnish a ready method for the instantaneous preparation of sea water for bathing purposes: a large teacupful readily dissolves in each gallon of hot or cold water. These salts have been in use for many years, and have a well-established reputation.

Hazeline. Pinol. Compound Menthol Snuff. Ichthyol Ointment.—BURROUGHS, WELLCOME & Co., London.—We have received a specimen of **Hazeline**, the valuable properties of which are now so well known that it needs no praise at our hands; and also a specimen of **Pinol**, which is a fragrant volatile oil of exquisite fragrance, useful for internal administration in

doses of two to five minims, as well as for inhalation. **Compound Menthol Snuff** contains a small quantity of cocaine, and is useful in hay asthma, as well as in various forms of rhinitis. **Ichthyol Ointment** is a somewhat potent remedy, intended for application to *unbroken* inflamed surfaces; it is conveniently supplied in metallic tubes for easy use.

Olive Oil Soap. Pure Carbolic Soap.—CHRISTOPHER THOMAS & BROS., Limited, Bristol.—These two specimens of soap have been forwarded as samples of the products of an old Bristol firm, which has maintained its position notwithstanding the energy and activity of its young and enterprising advertising competitors.

The **Olive Oil Soap** is made from a recipe which was first used by the firm's predecessors, Messrs. Saml. Fripp & Co., some century and a half ago. Fripp's Olive Oil Soap has had a long-lived reputation, and is even now by no means out of date. It is a good nursery and toilet soap, and the firm has frequently received testimonials as to its efficacy in relieving the irritation caused by eczema and similar skin diseases. This soap must still be classed in the first rank, as it is pleasant to use, and has nothing irritating or objectionable in its composition. The **Carbolic Soap** contains five per cent. Calvert's carbolic white crystals.

Cellular Cloth.—THE CELLULAR CLOTHING COMPANY LTD., London.—Mr. G. Standerwick, of Stokes Croft, who is the local agent, has sent us some samples of this material, the special qualities of which are:—1. It retains warmth, but yet permits free evaporation. 2. Owing to the retention of air (the best non-conductor of heat) in the cells of the cloth, it is warm in winter and cool in summer. 3. Being exceptionally porous, it is the cleanliest and most easily washed of all forms of clothing. 4. It is extremely durable. 5. The question of material (cotton, wool, or silk) becomes of secondary importance; the retention of air in the cells determines the warmth. Patterns in wool, cotton, and silk, with various mixtures of material, have been forwarded to us: we can only say that they appear to be of excellent make, and give a very large variety of pattern. The various garments devised by the Cellular Clothing Company are arranged to suit all sorts and conditions of men, women, and children: the only remark we need make is that in recommending our patients to wear them we are adopting the usual method of medical self-abnegation, inasmuch as we are told that "the wearers of cellular clothing are remarkably free from colds and chills." This being the case, we need such protection even more than many of our patients, and we may at least set them an excellent example. From personal experience we are able to say that the pyjama suits are exceedingly comfortable.

Bristol Medico-Chirurgical Society.

Annual Meeting, October 10th, 1894.

Mr. J. Greig Smith, President, in the Chair.

After a vote of thanks to the retiring President (Mr. Greig Smith) had been unanimously passed, Dr. A. J. Harrison took the Chair, and read his inaugural address (see page 273), for which a cordial vote of thanks was given him. The Honorary Secretary (Mr. G. Munro Smith) and the Assistant-Editor and Honorary Librarian (Mr. L. M. Griffiths) read their annual reports, which were adopted. The following officers were chosen for the ensuing year:—President-elect; Mr. Arthur W. Prichard: Honorary Secretary; Mr. J. Paul Bush: Honorary Librarian; Mr. L. M. Griffiths: Members of Committee; Dr. Michell Clarke, Mr. J. Dacre, Mr. W. H. Harsant, Dr. Aust Lawrence, Dr. J. E. Shaw, and Mr. G. Munro Smith.

November 14th, 1894.

Dr. A. J. Harrison, President, in the Chair.

Mr. C. A. Morton showed a patient with congenital deficiency of junction between ribs and sternum.

Dr. H. Waldo and Dr. Harrison showed patients with lichen planus.

Mr. W. M. Barclay showed a patient with a very useful hand, after complete excision of the wrist for disease following an injury.

Mr. Greig Smith showed two calculi removed by suprapubic operations; a malignant growth removed by pylorectomy; a specimen of resection of malignant stricture of colon; a papillomatous growth in an ovarian cyst; an ovarian cyst showing a large number of secondary growths distributed over the whole of the cyst-wall; and a large uterine fibroid that had caused obstruction by pressure on the rectum.

Dr. J. Michell Clarke read a paper on aortic valve disease, in which ulcerative change supervened, and in which the pulsus bisferiens occurred. Dr. Clarke showed some specimens of hemorrhages in the pons Varolii.

Dr. G. Parker read a paper on chloride of calcium.

December 12th, 1894.

Dr. A. J. Harrison, President, in the Chair.

Dr. H. Waldo showed (1) a girl, aged 19, with primary lateral sclerosis and resulting spastic paraplegia and deformity; (2) a boy with lichen pilaris.

Mr. Paul Bush showed a man with extensive necrosis of skull.

Mr. C. A. Morton showed a patient with gummata of the skull and limbs.

Mr. A. W. Prichard showed a portion of a catheter which he had removed by means of a supra-pubic operation from the bladder of a man, who had had a calculus removed some years before.

Mr. C. A. Morton reported a fatal case of pyæmia from middle-ear disease, in which the internal jugular vein was ligatured.

Dr. J. Swain read the notes of a successful case of castration for prostatic hypertrophy.

J. Paul Bush, *Hon. Sec.*

The Library of the Bristol Medico-Chirurgical Society.

At the Annual Meeting held on October 10th, 1894, Mr. L. M. Griffiths, the Honorary Librarian, read the following Report:—

Since the last Annual Meeting 481 volumes have been added to the Library, which now consists, including 424 duplicates, of 3,776 volumes.

The donors during the twelve months have been: Mr. J. W. Arrowsmith, The Dowager Lady Bowman, Dr. J. Broom, Dr. R. E. Burges, the Council of the Clinical Society, Mr. G. G. Corbould, Mr. W. Duncan, Dr. F. H. Edgeworth, Mr. J. Ewens, Mr. J. Fawn, Messrs. George's Sons, Mr. L.M.Griffiths, Mr.W.H.Harsant, Mr. F. P.Lansdown, Dr. C. Martin, Mr. Augustin Prichard, Dr. A. B. Prowse, the Royal Academy of Medicine in Ireland, Dr. J. E. Shaw, Mr. E. J. Sheppard, Mr. Greig Smith, Dr. Shingleton Smith, Mr. F. W. Stoddart, the Surgeon-General United States Army, the Council of University College, Bristol, the Editors of the Pathological Report of University College, London, Mr. Algernon Warren, Mr. W. Roger Williams, and Messrs. J. Wright & Co.

The combined arrangement with University College works well. The authorities of the College bestow much thoughtfulness on the ways of extending the usefulness of the Library. The services of the Clerk have been reinforced by those of an assistant, and one of these is always in the Library to attend to the wants of readers. Since my last Report the greater portion of the libraries of the Infirmary and Hospital, and of the Medical Section of the Museum and Library have been transferred to the Medical School, and members of the Society have now access to more than 13,000 volumes, and can take out on loan the duplicates, of which there are a large number. The number of current periodicals regularly received in the Library is over 120.

The following donations have been received since the publication of the list in September:

November 30th, 1894.

T. F. Edgeworth (1)	113 volumes.
L. M. Griffiths (2)	1 volume.
A. J. Harrison, M.B. (3)	83 volumes.
Augustin Prichard (4)	2 ,,
R. Shingleton Smith, M.D.	1 volume.
The Council of University College, Bristol (5) ...	1 ,,

Three framed pictures have been presented by Mr. T. F. Edgeworth, and two unframed by Mr. C. K. Rudge.

FOURTEENTH LIST OF BOOKS.

The titles of books mentioned in previous lists are not repeated.

The figures in brackets refer to the figures after the names of the donors, and show by whom the volumes were presented. The books to which no such figures are attached have either been bought from the Library Fund or received through the *Journal*.

Alcohol Question, The ... ... (3) 2nd Ed. [N.D.]

Anderson, J. ... *Medical Nursing* (Ed. by Ethel F. Lamport) 1894

Arbuthnot, J. ... *An Essay concerning the Nature of Aliments* (1) 2nd Ed. 1732

Atthill, L. ... ... *Diseases Peculiar to Women* ... ... (3) 3rd Ed. 1875

Baillie, M. ... ... *Morbid Anatomy* ... ... (1) 8th Ed. 1833

Bain, A. ... ... *The Senses of the Intellect* ... ... (3) 3rd Ed. 1868

Baker, J. (Ed.) ... *New Guide to Bristol and Clifton* ... ...[1894]

Balfour, G. W. ... *The Senile Heart* 1894

Black, D. C. ... *The Urine in Health and Disease, and Urinary Analysis* 1895

Bond, T. E. ... *On Dental Medicine as connected with Study of Dental Surgery* ... ... (1) 2nd Ed. 1852

Bowman, J. E. ... *Medical Chemistry* ... ... (1) 2nd Ed. 1852

" ... *Practical Chemistry* (3) 6th Ed. (Ed. by C. L. Bloxam) 1871

Bowman, W. ... *Lectures on the Eye* ... ... (3) 1849

Brande, W. T. ... *A Manual of Chemistry* ... ... (1) 4th Ed. 1836

Brinton, W. ... *Lectures on the Diseases of the Stomach* (3) 2nd Ed. 1864

" ... *Intestinal Obstruction.* (Ed. by T. Buzzard) ... (3) 1867

Brodhurst, B. E. *On Club-Foot* ... ... (1) 1856

" *Diseases of the Joints involving Anchylosis* (1) 3rd Ed. 1861

Brodie, C. G. ... *Dissections Illustrated* ... ... Part III. [1894]

Bubis, G. ... ... *Sperminum-Poehl in chemischer, physiologischer und therapeutischer Beziehung* 1894

Bucknill and D. H. Tuke, J. C. *A Manual of Psychological Medicine* (3) 2nd Ed. 1862

Carpenter, R. L. (Ed.) *Memoirs of the Life of the Rev. Lant Carpenter* (1) 1842

Carpenter, W. B. *A Manual of Physiology* ... ... (1) 2nd Ed. 1851

Celsus, A. C. ... *Medicine in Eight Books*—Latin and English. (Tr. by A. Lee) ... ... 2 vols. (3) 1831-36

Chamberlaine, W. *Tirocinium Medicum*... ... ... (1) 1812

Chambers, T. K.... *The Indigestions* ... ... (3) 1867

Cheyne, W. W. ... *The Treatment of Wounds, Ulcers, and Abscesses* 1894

Churchill, J. F. *Consumption and the Hypophosphites* ... ... (1) 1875

Conquest, J. T. ... *What is Homœopathy?* ... ... (1) 2nd Ed. 1859

Cooper, S. ... .. *The First Lines of the Practice of Surgery* (3) 5th Ed. 1826

" *A Dictionary of Practical Surgery* ... ... (3) 7th Ed. 1838

Corfe, G. ... ... *A Popular Treatise on the Kidney* ... ... (1) 1839

Cyclopædia, Everybody's Pocket ... . [N.D.]

Da Costa, J. C. ... *A Manual of Modern Surgery*... 1894

Dalton, J. C. ... *Treatise on Human Physiology* ... ... (3) 2nd Ed. 1861

Denman, T. ... *Introduction to the Practice of Midwifery* (1) 7th Ed. (Ed. by C. Waller) 1832

Dixon, J. ... ... *Diseases of the Eye* ... ... (3) 2nd Ed. 1859

Drewitt, F. D. ... *On Gangrene of the Limbs following Typhoid Fever* ... 1894

Earle, L. ... ... *On Flooding after Delivery* ... ... (3) 1865

Elliotson, J. ...	*Lectures on the Theory and Practice of Medicine.* (Ed. by J. C. Cooke and T. G. Thompson) ... ... (1)		1839
Erichsen, J. E. ...	*On Concussion of the Spine* ... ... (3)		1875
Falconer, W. ...	*A Dissertation on the Influence of the Passions upon Disorders of the Body* ... ... (1)		1788
Fenwick, W. S....	*The Dyspepsia of Phthisis*		1894
Field, G. P. ...	*Aural Surgery* ... ... (3)		1876
Fothergill, J. M.	*The Heart and its Diseases* ... ... (3)		1872
Fox, J.	*The Natural History of the Human Teeth* ... ... (1)		1803
,, ...	*The History and Treatment of the Diseases of the Teeth, the Gums, etc.* ... ... (1)		1806
Fresenius, C. R....	*Instruction in Chemical Analysis* (Quantitative). (Ed. by J. L. Bullock) .. .. (3)		1846
,,	*Instruction in Chemical Analysis* (Qualitative). (Ed. by J. L. Bullock)... ... ... (3)	3rd Ed.	1850
Gaine, C.	*On Certain Irregularities of the Teeth* ... ... (1)	[N.D.]	
Gamgee, J. S. ...	*Researches in Pathological Anatomy and Clinical Surgery* (1)		1856
,, ...	*Amputation at the Hip-Joint* ... ... (3)		1865
Garrod, A. B. ...	*The Essentials of Materia Medica and Therapeutics* (3)	2nd Ed.	1864
,, ...	*Gout and Rheumatic Gout* ... ... (3)	3rd Ed.	1876
Gleason, E. B. ...	*Essentials of the Diseases of the Ear*		1894
Glenn, R. G. ...	*A Manual of the Laws affecting Medical Men* ... (3)		1871
Gray, S. F.... ...	*Supplement to the Pharmacopœia.* (Ed. by T. Redwood) ... ... (1)		1847
Gregory, J.... ...	*Conspectus Medicinæ Theoreticæ* ... ... (1)	10th Ed.	1836
Gregory, W. ...	*Handbook of Organic Chemistry* ... ... (3)	4th Ed.	1856
Hardwicke, H. J.	*Alpine Climates for Consumption*		1894
Hart, E.	*The Nurseries of Cholera : Its Diffusion and its Extinction*		1894
Hewitt, G.	*Diseases of Women* ... ... (5)		1863
Hodgson, J. ...	*The Hunterian Oration* ... ... (2)		1855
Hooper. R.... ...	*Medical Dictionary* ... ... (1)	6th Ed.	1831
Hovell, T. M. ...	*Diseases of the Ear, etc.*		1894
Howship, J. ...	*Discrimination and Appearances of Surgical Disease* (1)		1840
Hutton, A. W. ...	*The Vaccination Question*		1894
Inman, T.	*The Restoration of Health* ... ... (3)		1870
Jenner, W.... ...	*Diphtheria*... ... ... (3)		1861
Johnson. G. ...	*Notes on Cholera* ... ... (3)		1866
Jones, T. W. ...	*Ophthalmic Medicine and Surgery* ... ... (I)	3rd Ed.	1865
Jordan, F.	*Surgical Inquiries* ... ... (3)		1873
Kirkes, W. S. ...	*Handbook of Physiology* (3)	6th Ed. (Ed. by W. M. Baker)	1867
Laurie, J.	*Epitome of the Homœopathic Domestic Medicine* ... (1)		1853
Lawless, E. J. ...	*First Aid to the Injured and Management of the Sick* ...		1894
Lawrence, W. ...	*A Treatise on Ruptures* ... ... (1)	5th Ed.	1838
MacFarlane, A....	*A Clinical Manual*		1894
Maddock, A. B....	*Pulmonary Consumption, Bronchitis, Asthma, etc.* (1)	4th Ed.	1851
Manton, W. P. ...	*Syllabus of Lectures on Human Embryology*		1894
Manzaneque, M..	*Caracteristica terapéutica de las Aquas termales de La Garriga*		1894
Merei, A. S. ...	*On the Disorders of Infantile Development and Rickets* (1)		1855
Miller, J.	*The Principles of Surgery* ... ... (3)	3rd Ed.	1853

Moullin, C. W. M. *Enlargement of the Prostate* 1894
Muskett, P. E. ... *Prescribing and Treatment in the Diseases of Infants and Children*... ... ... 3rd Ed. 1894
Nodd, H. M. ... *Chemical Manipulation and Analysis, Qualitative and Quantitative* ... ... (3) [2nd Ed.] 1852
Norris, R. ... ... *On the Aggregation of Blood Corpuscles* ... ... (3) 1870
,, ... *The Physiology and Pathology of the Blood* ... ... (3) 1882
Osler, W. ... ... *On Chorea and Choreiform Affections* 1894
Owen's Conspectus; or Student's Remembrancer... ... ... (1) 1868
Page, H. W. ... *Injuries to the Spine and Spinal Cord* ... (3) 2nd Ed. 1885
Parker, A. ... ... *Artificial Teeth* ... ... (3) 3rd Ed. 1876
Parkes, S. ... ... *The Chemical Catechism* ... ... (1) 4th Ed. 1810
Pemberton, O. ... *Clinical Illustrations of Various Forms of Cancer* (3, 4) 1867
Pepper, A. J. ... *Elements of Surgical Pathology* ... ... 4th Ed. 1894
Phillips, R. ... *Translation of the Pharmacopœia of R.C.P., Lond.* 1836 (1) 3rd Ed. 1838
Pole, T. ... ... *The Anatomical Instructor* ... ... (3) 1790
Potârcă, J. ... ... *Sur l'Oesophagotomie intrathoracique par le médiastin postérieur* 1894
Purdy, C. W. ... *Practical Uranalysis and Urinary Diagnosis*... 1894
Quain, J. ... ... *Elements of Anatomy* ... ... (1) 4th Ed. 1837
Raymond, J. H. *A Manual of Human Physiology* 1894
Reece, R. ... ... *The Medical Guide* ... ... (1) 1804
Reed, D. M. ... *On Fever, Plague, Cholera Contagion, &c.* ... ... (3) 1846
Reid, D. B. ... *Text-book for Students of Chemistry* ... (1) 2nd Ed. 1836
Roberts, F. T. ... *The Theory and Practice of Medicine* ... ... 9th Ed. 1894
Robinson, J. ... *The Surgical, Mechanical and Medical Treatment of the Teeth* ... ... (1) 1846
Rohé, G. H. ... *Text-book of Hygiene* ... ... 3rd Ed. 1894
Rumsey, H. W.... *Essays on State Medicine* ... ... (4) 1856
Ryan, M. ... ... *Manual of Medical Jurisprudence and State Medicine* (1) 2nd Ed. 1836
Scarpa, A. ... ... *A Treatise on the Anatomy, Pathology and Surgical Treatment of Aneurism.* (Tr. by J. H. Wishart) (1) 1808
Smith, E. ... ... *Consumption: its Early and Remediable Stages* ... (1) 1862
,, ... *On Foods* ... ... (1) 3rd Ed. 1874
Smith, J. ... ... *Hand-Book of Dental Anatomy and Surgery* ... (1, 3) 1864
Solomon, J. V. ... *Tension of the Eyeball and Glaucoma, &c.* ... ... (3) 1865
Stevens, J.... ... *Medical Reform*... ... ... (1) 3rd Ed. 1848
Swan, R. L. ... *Diseases and Deformities of the Spine* 1894
Tanner, T. H. ... *Diseases of Infancy and Childhood* ... ... (3) 1858
,, ... *The Practice of Medicine* ... ... (3) 5th Ed. 1865
Taylor, A. S. ... *On Poisons* .. .. (1) 1848
Thomas, W. H. ... *Surgical and Descriptive Anatomy of the Bones, Ligaments, and Joints* ... ... (1) 1834
Thompson, Sir H. *Diseases of the Prostate* ... ... (1) 1861
,, *Clinical Lectures on Diseases of the Urinary Organs* (3) 2nd Ed. 1869
Thomson, A. T. ... *The London Dispensatory*... ... ... (1) 4th Ed. 1826
Thorowgood, J. C. *Asthma and Chronic Bronchitis* 1894
Tod, D. ... ... *The Anatomy and Physiology of the Organ of Hearing* (3) 1832

Toynbee, J..... ... *The Diseases of the Ear* ... ... (1) 1860
Tuke, J. C. Bucknill and D. H. *A Manual of Psychological Medicine* (3) 2nd Ed. 1862
Tweedie, A. ... *A System of Practical Medicine.* Vol. I. ... ... (3) 1840
Virchow, R. ... *Cellular Pathology.* (Tr. by F. Chance) ... ... (3) 1860
Walker, S. ... ... *A Treatise on Nervous Diseases* ... ... (1) 1796
Watson, P. H. ... *Excision of the Knee-Joint* ... ... (1) 1867
Watt, J. J..... ... *An Encyclopedia of Surgery, Medicine, etc.* ... ... (1) 1806
West, C. ... ... *Diseases of Infancy and Childhood* ... ... (3) 4th Ed. 1859
Whitlaw, C. ... *A Treatise on Inflammation, Fever, Cancer, etc.* ... (1) 1831
Williams, P. W.... *Diseases of the Upper Respiratory Tract* ... ... [1894]
Williams, W. R.... *Diseases of the Breast* 1894
Wilson, G. ... ... *Inorganic Chemistry* (1) [3rd Ed.] (Ed. by S. Macadam) [1866]
Withington, E. T. *Medical History from the Earliest Times* 1894
Wright, W. ... *On the Varieties of Deafness and Diseases of the Ear* (1) 1829
Wyllie, J. ... ... *The Disorders of Speech* ... ... [1894]

TRANSACTIONS, REPORTS, JOURNALS, &c.

American Journal of Dental Science, The ... ... (1) Vols. VI., VII. 1856-57
American Journal of Obstetrics, The ... ... Vol. XXIX. 1894
American Journal of Ophthalmology, The ... ... Vol. X. 1893
Annual of the Universal Medical Sciences. 5 Vols. 1894
Asclepiad, The ... ... Vol. X. 1893
British Gynæcological Journal, The ... ... Vol. IX. 1893
Buffalo Medical and Surgical Journal ... ... Vol. XXXIII. 1894
Calendar of University College, Bristol ... ... (5) 1894
Cincinnati Lancet-Clinic, The ... ... Vol. LXXI. 1894
Clinical Society of London, Transactions of the ... ... Vol. XXVII. 1894
Dental Review, The ... ... (1) Vols. IV., V. 1862-63
Glasgow Medical Journal, The ... ... Vol. XLI. 1894
Hospital, The ... ... Vol. XVI. 1894
Hospitals—
Johns Hopkins Hospital Reports, The ... ... Vol. IV., No. 6 1894
Westminster Hospital Reports, The ... ... Vol. VIII. 1893
Journal of the American Medical Association, The ... ... Vol. XXII. 1894
Lancet, The ... ... (1) Vol. II. for 1827-28; (1) Vol. I. for 1828-29; (1) Vol. I. for 1830-31
London and Provincial Medical Directory, The ... (1) 1848, 1858, 1861
London Medical Gazette, The ... ... (1) Vols. III.—VI. 1829-30
Medical and Surgical Reporter, The ... ... Vol. LXX. 1894
Medical Directory, The ... ... (1) 1873
Medical List, The ... ... (1) 1857
Medical Register, The ... ... (1) 1887
Medico-Chirurgical Review, The ... ...(1) 1822-23
Montreal Medical Journal, The ... ... Vol. XXII. 1894
Odontological Society of London, Transactions of the, 1856-57 ... (1) 1858
Ophthalmological Society of the United Kingdom, Transactions of the Vol. XIV. 1894
Pharmaceutical Journal and Transactions ... ... (1) Vols. IV.—VI. 1845-47
Polytechnic Review and Magazine, The ... ... [Vol. II. of 1844] (1) 1844
Quarterly Medical Journal, The ... ... Vol. II. 1894

SCRAPS

PICKED UP BY THE ASSISTANT-EDITOR.

Clinical Records (9).—Doctor: "You must avoid all excitement, give up all stimulants, and drink only water." Patient: "But, doctor, the idea of drinking water excites me more than anything else!"

As Others See Us.—"The other day I heard an apophthegm," writes Mr. James Payn, "which left me with a very exalted idea of the gentleman who uttered it. We were talking of the medical profession, and he observed of it: 'There is a great difference between a good doctor and a bad one, but very little between a good doctor and none at all.' The cynicism of the remark was deplorable, but its intelligence was indisputable."

Coffee.—En 1711, le *Mercure galant* publiait, sur l'air du *Noël des Bourgeois de Chastres*, une *Chanson sur le café*. Quelques jours après, on la chantait, modifiée et considérablement augmentée. On y lisait, entre autres vers mirlitonesques, les suivants, qui ont au moins le mérite de résumer les indications thérapeutiques de la boisson qui faisait alors fureur:

Si vous voulez sans peine
Vivre en bonne santé,
Sept jours de la semaine,
Prenez de bon café.
Il vous préservera de toute maladie,
Sa vertu chassera, la, la
Migraine et fluxion, don, don,
Rhume et mélancolie.

Sa force est sans égale
Contre les maux de cœur,
La glande pinéale
Y trouve sa vigueur.
Quand on y met du lait, il guérit la poitrine,
Au sang il donnera, la, la
La circulation, don, don,
Dans toute la machine.

Et cela continuait sur ce ton fluidifiant, et la chanson comptait au moins deux bonnes douzaines de couplets! . . .—*Gazette de Gynécologie.*

A Therapeutic Retroversion.—Much fun has been made of John of Gaddesden—one of the authorities of Chaucer's "Doctour of Physik" (see *Journal*, p. 160)—for saying that the best treatment of small-pox was to wrap the patient in red cloth, and to have everything red about the bed.

The American Practitioner and News, after quoting Gaddesden's directions from his *Rosa Medicinæ* and also Sir Thomas Watson's comments thereon, goes on to say: "In the light of these historical reminiscences the following, which we clip from the New York *Medical Record* is most interesting:

> 'RED LIGHT FOR SMALLPOX.—Finsen (*Hosp. Tid.*, No. 27, 1893) has made some observations on the effects of light on the skin. He referred to the good results obtained by Black and others by the exclusion of daylight in the treatment of smallpox, but argued that, as Widmark has shown that it is the ultra-violet rays which have the strong chemical action, it is not necessary to exclude the daylight, but by using red curtains tightly drawn, or red window panes, the injurious effects of the light can be prevented. The correctness of this hypothesis was proven by Svendsen, of Bergen, who last summer treated four cases of smallpox in unvaccinated patients by covering the windows with thick red woollen curtains. The patients escaped the suppurative stage; there was no rise of temperature, no œdema. The patients passed from the vesicular stage, which was slightly prolonged, into convalescence, and escaped scarring.'

"In this connection the verse of old John of Gaddesden's contemporary, Chaucer, is apt indeed:

> 'For out of the old fieldes, as men saithe,
> Cometh all this new corn fro yere to yere;
> And out of old bookes, in good faithe,
> Cometh all this new science that men lere.'

"The moral of this is, that inasmuch as things are found to be so by experience long before science comes and tells us why they are so, much that seems silly in the practice of olden times may be found by science to have good foundation in fact.

"The old masters in music made all their wonderful blendings of melody, harmony, and orchestration long before the physicists knew why they wrote as they did, and, while the analogy is incomplete, we may expect medical science to justify much of the practice of the fathers in medicine.

"The solar spectrum tells us why John of Gaddesden made things red around the smallpox patient; bacteriology (asepsis) tells why the traditional midwife burns the hole in the compress that goes over the cord of the newborn infant; the marvellous effects of thyroid gland injected or ingested in myxœdema tell us how results may have been obtained through the administration of the viscera or glands of various animals in some affections; while hypnotism, to say nothing of other phases of psychic science, may yet redeem from scorn the superstitious belief of the ancients in stella strokes, demoniacal possession, doubles, ghosts, and witchcraft, and their faith in the therapeutic efficacy of charms, characts, amulets, fasts, sacred verses, and prayers."

Medical Philology (XII).—The term "Brawn" is now rarely used except in its restricted application to a dish usually prepared from pig's-head, but "brawny" in the sense of "muscular" is not uncommon. One of the most familiar instances in literature is in Longfellow's *Village Blacksmith*. Although in Middle English "brawn" was often used specifically to denote boar's flesh, it also signified any muscular structure. In an English vocabulary (of the 15th century) Brawne is given as the English equivalent of *musculus*, *sura*, and *pulpa*. (Wright's *Vocab.*, 635, 24, 25, 26.) The *Promptorium* gives "**Brawne** of a bore. *Aprina*." Derived from the *Campus Florum*, it added: "**Brawne** of a checun or cheken. *Pulpa*;" and "**Brawne** of mannys leggys or armys. *Musculus*, *lacertus*, *pulpa*." Mr. Way's note is:

> Brawne, which Tooke conjectured to be boaren, flesh being understood, was applied anciently in a more general sense than at present. The etymology of the word may be traced with much probability to the Latin, *aprugnum*, *callum*. Piers Ploughman speaks of "brawn and blod of the goos, bacon and colhopes;" and Chaucer in the Knight's Tale applies the word, as it has been here, to the muscular parts of the human frame.
>
> "His limnes gret, his braunes hard and strong."
>
> The gloss on Gautier de Bibelesworth gives the word in this sense,
>
> "*En la jambe est la sure*, (the caalf.)
> *E taunt cum braoun rest ensure*. (the brahun.)"—Arund. MS., 220, f. 298.
>
> "Brawne of a man, *musculus*." CATH. ANGL. "*Lacerna*, *vel lacertus*, *proprie*, *superior pars brachii vel musculus*, brawne of the arme." MED. Harl. MS., 2257. "He hath eate all the braune of the lopster, *callum*." HORM. "*Braon*, *le gras des fesses*." ROQUEF. Roman de Rou.

The *Catholicon* gives *sura* as well as *musculus* as an equivalent of "brawne of a man," and has also "**Brawne**; *aprina*, *pulpa*; *aprinus*, *pulposus*." Mr. Herrtage's notes are:

> "*Musculus*. A muscle or fleashie parte of the bodie compacte of fleash, veines, sinewes and arteries, seruyng especially to the motion of some parte of the bodie by means of the sinewes in it. *Musculosus*. Harde and stiffe with many muscles or brawnes of harde and compacte fleash." Cooper. Chaucer, in the Prologue to the Canterbury Tales, 546, tells us that
>
> "The Mellere was a stout carl for the nones,
> Ful big he was of *braun*, and eek of boones."
>
> and in the Legende of Goode Women, Dido, l. 145, Eneas is described as of
>
> "a noble visage for the noones,
> And formed wel of *brawnes* and of boones."
>
> Cooper gives "*Pulpa*. The woodde of all trees that may be seperated or clefte by the grayne of it, and is the same in timber that *musculus* is in a mans bodie. A muscle or fleashie parte in the bodie of man or beaste. A peece of fleash." "*Pulpa*. Brawne." Medulla. O. Fr. *braon*.
>
> See the *Song of Roland*, l. 97, where the boar is described as tearing a man's arm "clene from the *braun*, the flesche, & the lier."
>
> In the *Sege of Melayne*, 1599, the provisions of the French army are said to have been "brede, *brawne* and wyne." See the Babees Book, p. 53.

The *New English Dictionary* gives from *Piers Plowman* (xiii. 62) the variant reading (Crowley Text) of the line quoted by Mr. Way: "Wombe-cloutes and wylde braune & egges yfryed with grece." These with "mortrewes ['a kind of soup,'] and puddynges" are represented as forming a specially good meal. "Wombe-cloutes" were pieces of omentum (see Wright's *Vocab.*, 789, 19), and now known as tripe, which it will be remembered Mr. Filer with such statistical dogmatism pronounced to be a most wasteful article of consumption. "Wombe-cloutes" are, as Prof. Skeat says, literally "belly-rags." Womb signified the whole or any part of the abdomen. Jack Falstaff, bemoaning his corpulence, uttered the pathetic lament, "My womb, my womb, my womb undoes me." (2 *Henry IV.*, iv. 3, 25). "Cloutes" originally meant bits or pieces of anything,

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